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STORY OF THE FAIRBAIRNS.

TOWARDS the end of last century, the family of Andrew Fairbairn resided at the foot of the Woodmarket, Kelso. Andrew was a man in humble circumstances, but was intelligent and industrious, and fond of reading. He had spent his early life as a ploughboy, and afterwards as a gardener; by which means, along with the perusal of books, he gained a good knowledge of agriculture. Having in the course of pushing his fortunes gone to reside near a seaport in England, he was, during the exigencies of the American war, pressed on board a frigate, from which he was draughted into a ship of the line, and served under Lord Howe at the destruction of the Spanish fleet off Gibraltar. At the close of the war, he happened to be present at Spithead, when the *Royal George* sank, August 29, 1782, and assisted in saving the survivors. Receiving his discharge, he returned to Scotland, and settling in Kelso, married Miss Henderson, daughter of a tradesman in Jedburgh, and in due time had a family of sons and daughters. That may be called the beginning of the Fairbairns.

Andrew did not return to sea-life. He had had enough of naval adventure. Kelso, where he pitched his camp, is a pretty inland town on the north bank of the Tweed, once celebrated for an abbey, of which the ruins still exist, and having in its immediate neighbourhood the palatial mansion of Fleurs, the seat of the Dukes of Roxburghe. All around is a fine fertile country, where there is abundant scope for agricultural pursuits. To these he addicted himself, though taking him six days a week from home, and obliging him to devote the upbringing of his children in a great measure to his wife, who was eminently suited for this important duty. She was far from robust, and her poor state of health would have offered a good excuse for idleness; but possessing a spirit of indefatigable industry, she toiled in a way that reminds us of the singularly meritorious wife mentioned in Scripture—'She seeketh wool and flax, and worketh willingly with her hands. . .

She looketh well to the ways of her household, and catcheth not the bread of idleness. . . Her children arise up, and call her blessed.' The picture is accurate in every detail. According to the economy of the period, when as yet the domestic spinning-wheel was in operation, Mrs Fairbairn bought wool and flax, which she spun into yarn, reeled into hanks, and gave out to a weaver to be manufactured. From the varied materials so produced, she provided shirtings, sheets, and blankets for the family. And not only so, but for some years she made all the coats, trousers, and other garments for her husband and sons, besides all the dresses required for her young daughters.

William Fairbairn, the eldest and most notable of her sons, was born at Kelso, February 19, 1789. There he received a plain elementary education at the parish school, paddled like other boys in the Tweed, and acquired a proficiency in climbing the tall picturesque ruins of the abbey. In 1799, the family were induced to remove to Moy, a farm a few miles from Dingwall in Ross-shire. Here commenced a desperate struggle to wring a subsistence out of a piece of land plentifully dotted over with whins, stones, rocks, and other obstructions. Andrew, the father, had an opportunity of exercising all the agricultural knowledge he possessed. Like many Scotsmen in similar circumstances, he did not despair. To remove the various impediments to the plough, he adopted an ingenious method. Having managed to draw the large stones and rocks into heaps, he laid over them quantities of dried whins, which he set on fire. The stones and rocks became red-hot, and by the pouring on them of cold water from a bottle, were fractured and blown to shivers. By the wondering neighbours, this cheap and ready method of ridding the land of whins and rocks at the same time was considered an extraordinary performance. Next was instituted a system of draining; and in two or three years, splendid crops of turnips and barley were growing on land which had hitherto been little better than a wilderness.

While the family were at Moy, William received no addition to his education, and had to

occupy much of his time as a nurse to his youngest brother, Peter, then a child of fifteen months old. To relieve himself of the trouble of carrying the child on his back, he fell on the device of making a little wagon with four wheels. It was a somewhat difficult undertaking, for his only tools were a knife, a gimlet, and an old saw. With these and a red-hot poker to burn holes in the wheels for the axles, he was able to knock up a small wagon, which proved quite a success. He dragged Peter about the farm, to the delight of the infant and the satisfaction of his mother. Encouraged by the success of the construction, he began to make small boats and mills with his knife, that were the admiration of neighbouring boys; such performances giving, as is believed, a bent to his mind as regards mechanical construction. Some untoward circumstances led Andrew Fairbairn to quit Moy and to become steward to a Highland laird at Mulloch. In this situation he remained only two years; and now, disgusted with the Highlands, he removed with his family, in 1803, back to Kelso. There he left them while he occupied the position of farm-manager in Yorkshire. This was a dark period in the history of the Fairbairns. The father did his best to supply means by transmitting part of his wages, but the wages were irregularly paid, and sometimes the family were on the brink of want. Being now a tall lad of fourteen, William made an effort to get an employment which would bring in a few shillings a week. He considered himself fortunate in getting work as a mason's labourer at the building of the new bridge across the Tweed at Kelso—one of Rennie's handsome structures. When only a few days at this toilsome employment, William suffered a dire misfortune. By the clumsy management of a companion in carrying a hand-barrow, a heavy stone fell on his leg, inflicting a deep wound, and throwing him off work for nearly three months. When the family were in the depths of penury, the father succeeded in getting an appointment at Percy Main Colliery, near South Shields, as steward of a farm belonging to the coal-owners. There was still the disadvantage of being absent from his family, but the pay regularly administered put him in comfort, and he had an opportunity of getting some employment for his eldest son.

The employment so secured was not much to speak of: it was only that of driving a coal-cart, but nothing better cast up, and was dutifully endured amidst a dissolute and contentious population, until, at the instance of the owners of the colliery, William, in 1804, was bound apprentice for seven years to Mr John Robinson, the engine-wright of the establishment. Such was the start in life of William Fairbairn as an engineer. At first, his wages were five, afterwards rising to twelve, shillings a week; but there was extra work paid for separately, by which his small wage was often doubled, and he was able to help his parents, who were struggling with a very limited income.

As we all know, there are two ways of pursuing an industrial occupation in youth. One is to do no more than what is immediately required, caring little for the future; the other is to endeavour, by every available means, to strike out a course of self-improvement, not only for the pleasure of doing so, but it may be in the hope of reaping

some future advantage. William Fairbairn adopted the latter method of getting through his apprenticeship. He laid down for himself a programme of self-instruction, while most other lads about him spent all their leisure time in coarse and profitless amusements. His weekly programme is worth the attention of young men placed in similar circumstances. Every day had its assigned work—Monday evenings, the study of arithmetic and mensuration. Tuesday, reading history and poetry. Wednesday, recreation, reading novels and romances. Thursday, mathematics. Friday, Euclid, trigonometry. Saturday, recreation and sundries. Sunday, church, reading Milton, &c. These several exercises were facilitated by books procured from the North-Shields subscription library, for which his father bought for him a ticket. Besides going through a course of reading the best historical and other works, which widened his knowledge and cultivated his feelings, he in a period of three years went through a complete system of mensuration, and as much algebra as enabled him to solve an equation; also a course of trigonometry, navigation, and some other branches of science. At times he devised pieces of machinery, which taught him the necessity of arranging and concentrating his ideas in matters of mechanical ingenuity. Having a taste for music, he made a violin, on which he taught himself to play familiar Scotch airs, though never with any degree of brilliance. His mind leaned towards more solid acquirements. As a kind of promotion, he was removed from the workshop to take charge of the steam-engine and pumps. Now, he was more his own master, and had intervals of time at his disposal. No amount of leisure, however, diverted him from his course of self-culture. His companions spent not a little time and money in beer-drinking, which kept them in poverty, and effectually stood in the way of their advancement. One of his early contemporaries was happily superior to these debasing pursuits. This was George Stephenson, with whom he became acquainted. George had the charge of an engine at Willington Ballast Hill, only a mile or two off, and being recently married, was somewhat pinched in the means of livelihood. To enable him to earn a few shillings, Fairbairn frequently took charge of his engine, while he took a turn at heaving ballast out of the colliery vessels. It is interesting to hear of facts like this of two men who rose to eminence through self-culture and unrelaxing perseverance.

At the close of his apprenticeship, and now twenty-two years of age, William Fairbairn went to London in search of employment as a millwright or working engineer. At this time Rennie was engaged in building Waterloo Bridge, and offered work to William Fairbairn. But—and a sad 'but' it was—the Millwrights' Society, which assumed the right of determining who should be employed, would not allow work to be given to him; and for a time, along with a companion similarly situated, he underwent serious privations. Unless for succour from some hospitable relatives who gave him a dinner on Sunday, he would have been well-nigh starved. A brighter day at length dawned. A number of workmen had the fortitude to resist the monopoly of the Millwrights' Society, and banding together, set up a Society of free and independent

labourers, under whose auspices Fairbairn got employment at a patent Ropery at Shadwell. Here and elsewhere he wrought as a journeyman two years in the metropolis, all the time realising good wages of from two to three pounds a week, and as formerly occupying his leisure hours mostly in reading. As he lived moderately, he saved some money, with which he hoped to push his way forward. Unluckily, he fell in with a crazy projector, who had devised a plan of delving land by machinery. The thing was ingenious, but not practicable. Induced to make a machine for the inventor, Fairbairn's small savings were swept away. He was more fortunate in his next order. It was to make a machine for chopping meat for sausages, for which he was promised thirty-three pounds by a pork-butcher. The machine, constructed with a fly-wheel and a double crank, with a dozen knives crossing each other, did its work admirably. The pork-butcher was delighted, and paid handsomely for the machine.

Put in pocket by this piece of business, Fairbairn proceeded to Dublin in quest of work, and got employment in constructing nail-making machinery. This lasted during a summer, and back he came to England, the voyage by packet to Liverpool occupying two days. A lucky thought directed him to try Manchester as a field of operations. Here he received employment from Mr Adam Parkinson, for whom he worked two years, and from his earnings was able to save twenty pounds, a sum which he destined to set him up in married life. For several years he had corresponded with Dorothy Mar, daughter of a farmer at Morpeth, and for whom he entertained an ardent affection. Fortune, as he imagined, being now propitious, marriage with Miss Mar could be discreetly contemplated, and the marriage took place June 16, 1816. The young pair commenced house-keeping in a very small and modest domicile at Manchester. William Fairbairn had still to make his way in the world, and blest with this good wife, set about doing it vigorously. For certain spheres of usefulness, Manchester offers better scope than even London. In partnership at first with Mr James Lillie, he began an independent career as a millwright, or in fact, a contractor for any large undertaking from a bridge to a spinning-factory. The two in setting up business had hardly any money, but they had brains, which had been pretty well exercised, and people were disposed to throw work in the way of what seemed to be two eager and clever young men. A large job executed for Mr Murray, a cotton-spinner, put them on their feet. Well-doing needs only a beginning. Almost immediately followed the works on a new cotton-mill for Mr John Kennedy, partner in the firm of Messrs McConnel and Kennedy, then the largest spinners in the kingdom. The skillful manner in which improvements were introduced into the new mill brought a press of orders. The business prospered so greatly, that at the end of five years the two young men found themselves with a stock and tools worth five thousand pounds. Large and commodious premises were erected, and contracts for gigantic works were undertaken in England, Scotland, and Switzerland.

Fairbairn lived at a time when the world was startled with the marvels of steam-traction on railways, and he fancied that a similar means of

propulsion could be adopted on canals. In this, after several costly experiments, he found himself mistaken, and the drainage of money was so great as to lead to a dissolution of his partnership with Mr Lillie. Now (1832), he rested entirely on his own energies and resources; but strong in self-reliance, he had no fears of the result. He turned his attention to a new branch of engineering manufacture, that of iron ship-building. For a time he had two establishments, one in London, the other in Manchester, and collectively employed two thousand hands. In 1835 began his famous investigations into the strength of iron, as regards girders, beams, pillars, and so forth; his experiments being of much scientific and mechanical importance. This, indeed, might be described as the great work of Fairbairn's life; for from his discoveries has sprung that remarkable adaptation of cast-iron in various forms—to house-building, the construction of bridges, and other works. About the same time, owing to a strike of boiler-makers at Manchester, he invented a method of riveting the plates of boilers by machinery, which at once superseded hand-labour. No longer were people assailed with the din of a hundred hammers riveting together iron plates; the machine of Fairbairn's invention substituted a rapid, noiseless, and comparatively cheap method of construction.

Until his fiftieth year, Mr Fairbairn wrote an autobiographical account of his career, and the projects with which he was concerned, which has been incorporated in the recently issued work, *The Life of Sir William Fairbairn, Bart.*, by W. Pole (Longmans, 1877). Mr Pole continues the narrative, but in so fragmentary and meagre a form as to give us little insight into the private life of the person to whom he refers, or of the family to which he belonged. Happily we were honoured with the friendship not only of Sir William, but of his brother, Sir Peter Fairbairn of Leeds—the brother whom when a child he drew about in a little wagon of his own making, long ago in the Highlands. Our last interview with Sir William was shortly before his decease, when on what we believe was his farewell visit to Scotland. From both brothers we learned a variety of details relative to their respective professional pursuits, and on all occasions were struck with the strong, practical common-sense and tact which had guided them through life. From the humblest possible circumstances, each in his own way had attained distinction by the exercise of sound judgment and persevering industry connected with the manufacture of machinery. The lesson which their lives afforded was this: that success in life is less generally due to genius than to indomitable diligence along with integrity of character.

Sir William Fairbairn never, as we know, aimed at being a great man. He wanted only to be useful in his day and generation. His habits of industry were extraordinary. Besides devoting himself specially to new mechanical contrivances and scientific researches, he spent much time in his later years in writing papers for the British Association and other public bodies. On one subject he fastened keenly. It was the prevention of smoke from factory chimneys, which he shewed could be effectually done by a more perfect combustion of fuel. The paper appeared in the Transactions of the British Association for 1844. It is

doubtful if it made many converts. There seems to be a determination among manufacturers to disregard all advice or remonstrance on the subject. For more than thirty years we have used a plan for consuming smoke with perfect success and considerable economy of fuel, but our neighbours for the most part perversely go on polluting the atmosphere as usual.

As is well known, Sir William Fairbairn distinguished himself by his invention of the tubular iron bridge, sustained without stays, and, which adopted by Stephenson, was employed in the construction of the famous tubular iron bridge across the Menai Strait, which is entitled to be called the mechanical wonder of England. We have never been shot along in a railway train through that iron tube, formed by a succession of square cells placed end to end, without thinking of Fairbairn's bold ingenuity. The reputation he acquired by this and other inventions of a useful kind brought him honours from numerous quarters. He had declined to accept a knighthood, and was reserved for the higher dignity of a baronetcy, which was conferred during Mr Gladstone's tenure of office in 1869. Two years previously, he had the misfortune to lose his eldest son, John, a blow which was severely felt by him. Coming from a long-lived family—his father dying in 1844 at the age of eighty-six—and tall, robust, and active, he enjoyed health till nearly the end of his days. He died peacefully August 18, 1874, leaving three sons and a daughter, also a widow, to mourn his loss. He was succeeded in the baronetcy by his son Thomas. Though the family wished the funeral to be private, it was, as a voluntary mark of respect, attended by upwards of fifty thousand persons. Such was the end of one of the greatest engineers of our day. His whole life pointed a valuable moral which it is unnecessary to repeat. His brother, Sir Peter Fairbairn of Leeds, predeceased him, leaving likewise descendants to perpetuate the reputation of the Fairbairns. W. C.

THE LAST OF THE HADDONS.

CHAPTER XXXI.—AT THE STILL.

WHEN was I first conscious of it? When was the first faint shadow of it perceived by the others? It would be difficult to say precisely when; but as days went by, some subtle change was taking place and making itself felt amongst us. Gradually an indefinable something was extracting the sunshine out of our lives. None of us admitted so much to each other; indeed I think we were all equally anxious to have it thought that everything was going on in precisely the same way as before. And yet—where was the frank confidence and ease which only a short time previously had so marked our intercourse? It had given place to constraint, and a restless anxiety to appear unconstrained.

I fancied that I could account for Lillian's nervousness and constraint; but Philip's gaiety seemed to be growing less and less spontaneous; and dear old Mrs Tipper looked depressed, not to say unhappy; whilst I myself felt uncomfortable without being able to trace the cause, unless it arose from sympathy with the others. In vain did I

try to account for the change. There was certainly no unkindly feeling betwixt us; indeed I think we were each and all more carefully considerate of each other's feelings than we had hitherto been, displaying a great deal more anxiety to prove that the strength of our attachment to each other was as undiminished as ever.

I felt no shade of difference in my own sentiments; I knew that I felt towards them precisely the same as before, although I was gradually adopting their tone. What troubled me most of all was the reserve growing up between Lillian and me. I tried more than once to break through it; but her real distress—her tears, as she clung to me, entreating me to believe in her love, pained without enlightening me. And when I a little impatiently replied that it rather seemed as though she did not believe in *my* love, it only brought more tears and distress.

She now frequently excused herself from accompanying Philip and me in our walks and excursions; and shut herself up in her own room many hours during the day. The explanation that she had taken a fancy for studying French history, was not a satisfactory one to me. True, there was evidence that she was diligently plodding through a certain amount of work; but why should that separate us? The studies she had hitherto undertaken had not shut me out of her confidence. She had often declared that the greater part of the enjoyment of such work was to compare notes with me upon the subjects we were reading; and why should French history be an exception?

I was beginning to lose patience—mystery has ever been and ever will be provoking to me—and one evening, when Robert Wentworth asked me some questions about our work, I irritably replied that he must ask Lillian; I could only answer for myself now.

I am only doing a little French history; she faltered, becoming very pale, and presently making an excuse for leaving the room.

'What is it? What has so changed her?' I asked, turning towards him.

'I do not observe any particular change,' he replied, lowering his eyes before mine.

'Pray do not you become as mysterious as the rest,' I said angrily.

But he *was* mysterious. Even Robert Wentworth, who had always been so outspoken and unsparing, was becoming considerate even to politeness. He made no reply, standing before the open window, apparently absorbed in thought. I was about to add some little remark that I had hitherto trusted to his friendship, in a tone meant to be caustic, when I caught sight of his face, and shrunk into my shell again. What made him look like that? What did it mean? And why did he so hurriedly take his departure the moment old Mrs Tipper came into the room, in a manner as unlike the Robert Wentworth of the past as it was possible to be?

But it must not be supposed that I was going to succumb to this state of things. Before I succumbed, I must know the reason why. It would take a great deal yet to make me lose hope. I had too much respect for them and belief in the power of my own love, to be without hope of succeeding

in dissipating the clouds which had gathered about us. The one thing to be done was to find out *what* it was that had come between us. Could I once find out that, I should not despair of the rest. After some anxious reflection, I fancied that I had discovered the cause of the alteration in Lillian's bearing, and took Philip into my confidence.

He listened gravely, I thought even anxiously, and yet he did not appear to think it necessary for me to make any attempt to alter things.

'If—she prefers being more alone, I think—Wouldn't it be best not to interfere, Mary?'—hesitatingly.

'If I did not care for her, perhaps it would be better not to interfere, as you term it,' I hotly rejoined. 'But as it happens, I do care for her, and therefore I cannot see her so changed without making some effort to help her.'

'No one could doubt your love for her, Mary,' he replied in a low voice, laying his hand gently upon mine.

'Then how can I help being anxious, especially when I see that it is not good for her to be moping alone? Any one might see that it is doing her harm. Cannot you see the difference in her of late?' He made no reply; and taking his assent for granted, I went on: 'Do you know I am sadly afraid that she is fretting?'—I did not like to say plainly about Arthur Trafford, but added: 'She is beginning to look just as she did in the first shock of finding that she had lost Arthur Trafford!—Ah, spare my roses!'

He was mercilessly, though I think unconsciously, tearing to pieces a beautiful bunch of light and dark roses, which had been given to me by one of the cottagers, scattering the leaves in all directions.

'I beg your pardon.'

'I really think you ought, sir!' was my playful rejoinder. 'If my path is to be strewn with roses, we need not be so extravagant as that about it. I shall not trust you to carry flowers again.'

He remained so long silent, standing in the same position, that I was about to ask him what he was thinking of, when he impetuously turned towards me, and hurriedly said: 'Why should there be any longer delay, Mary? Why cannot our marriage take place at once—next week? For God's sake, do not let us go on like this!'

'Go on like this!' I repeated, looking up into his face. 'Go on like this, Philip?'

'Say it shall be soon—say when?' catching my hands in both of his with a grip which made me wince, as he hurriedly continued: 'Why do you wish all this delay?'

Had it been spoken in a different tone—had he only *looked* differently! I tried to believe that it was the eagerness of happiness in his face; but alas! it looked terribly like misery! For a moment my heart stood still in an agony of fear; then I put the disloyal doubt aside, telling myself that it was my too exalted notions which had led to disappointment. I had expected so much more than any woman has a right to expect; and so forth. Then after a moment or two, I honestly replied: 'I do not wish it, Philip. Of course I will say next week, if you wish it; and'—with a faint little attempt at a jest—'if you do not mind about my having fewer farbels to pack?'

'I do wish it; and—and—until then I must ask you to excuse my not coming down quite so regularly. So much to arrange, you know,' he

hastily continued, 'in case we should take it into our heads to remain abroad some time.'

'Yes; very well,' I murmured, as one in a dream. It was all so different—so terribly different from anything I had expected.

But I soon persuaded myself that the fault, if fault there were, must be mine. How could *he* be changed—or if he were, why should he so eagerly urge me to delay our marriage no longer?

As if to rebuke my doubt, he turned towards me and gently said: 'God grant that I may be worthy of you, Mary! You are a good woman. I must hope in time to be more worthy of you.'

I was conscious that just then I could have better borne a loving jest at my imperfections than this little set speech of praise. I never before cared so little about being a 'good woman' as I did at that moment. But I told myself that I would not be critical—how horribly critical I seemed to be growing! So I looked up into his face with a smile, as I said something about his being perfect enough for me.

'You are good.'

'Oh, please do not say anything more about my goodness!'

There was another pause; and then he said: 'I think you mentioned that you wished it to be a quiet affair, Mary, and at the little church in the vale—St John's, isn't it called?'

'Yes, Philip.'

'And you must let me know what I ought to do besides procuring the ring and license. I am sure you will give me credit for wishing not to be remiss in any way, and will not mind giving me a hint if I appear likely to fall short in any of the—proper observances.'

'Proper observances! How coldly the words struck upon me!'

'Shall you not come down *once*, Philip?' I murmured.

'Once? O yes, of course; and—you can give me any little commission by letter, you know.'

Then looking at his watch, he found that he might catch the eight o'clock train, and hastily bade me good-night; asking me to excuse him at the cottage, and tell them about our plans.

'Eh bien, Philippe,' I returned, more disappointed than I should have cared to acknowledge at his not asking me to accompany him the remainder of the distance to the stile, to which I always walked with him when Robert Wentworth was not with us. Moreover, I thought that the parting kiss was to be forgotten. I believe that it *was* forgotten for a moment. But he turned back and pressed his lips for a moment upon my brow.

'Good-night, Mary. God grant I may be worthy of you!'

'Good-night, Philip,' I faltered.

As in a dream I walked down the lane, entered the cottage, and turned into the little parlour, not a little relieved to find no one there.

The heat was almost stifling, the swallows flying low beneath the lowering sky, and there was the heavy stillness—the, so to speak, pause in the atmosphere which presages a coming storm. The windows and doors were flung wide open; and I could hear Mrs Tipper and Becky talking to each other in their confidential way, as they bustled in and out the back garden, fetching in the clothes, which the former always put out to 'sweeten,' as

she termed it, after they were returned from the wash. Lillian was, I suppose, in her own room, as her habit was of late.

Throwing off my hat, I sat down, and with my hands tightly locked upon my lap, I tried to think—to understand my own sensations, asking myself over and over again what was wrong—what made me like this? half conscious all the while of a discussion over a hole in a tablecloth, that ought not to have been allowed to get to such a stage without being darned.

'A stitch in time saves nine, you know, Becky; never you leave a thin place, and you'll never have a hole to mend;' and so on.

Suddenly, as my eyes wandered aimlessly about the room, they fell upon some documents on the table referring to the sale of Hill Side, which Philip had brought down to shew us, and which I knew he had intended to take away. Reflecting that he was very desirous of completing the purchase, that the delay of a post might make a difference, and that I might yet overtake him if I were quick, I hurriedly caught up the papers in my hand and ran down the lane towards the stile. Have I mentioned that there was a sharp curve in the lane before it reached the stile, so that you came close upon the latter before it was in sight? I had just arrived at the curve when the sound of voices reached me; and recollecting that I had not waited to put my hat on, and not wishing to be recognised by any one, I paused a moment to draw the hood of my cloak over my head.

Robert Wentworth and Philip! I had time for a moment's surprise that the former should be there when we had not seen him at the cottage, before Philip's words reached me: 'And you have been waiting here to say this to me. But I am not so base as that, Wentworth! I have just begged her to be my wife at once, and she has consented. She suspects nothing.'

'Thank God for that!' ejaculated Robert Wentworth.

I could not have moved now had my life depended upon it—though my life *did* seem to depend upon it. 'Suspect what? What was there to suspect?' I asked myself in a bewildered kind of way.

'God grant that she may be always spared the knowledge!'

'She shall be, Wentworth, if it be in my power to spare her.'

'Great heavens! that it should be possible to love another woman after knowing her! Man, you never can have known her as she is, or it would be impossible for another woman to come between you. The other is no more to be compared!'

'Respect her, Wentworth; blame me as you will, but respect Lillian.'

'Lillian!' I muttered—'Lillian!'

'She is, I think—I trust, utterly unconscious of my—madness. But if she knew, and if she cared for me, she would be loyal to the right. You ought to be sure of that, knowing what her love for Mary is, Wentworth.'

'Yes; she is true; she will try to be true. But it is quite time that!'

I knew that the voices sounded fainter, and fainter, and that the sense of the words became lost to me, because they were walking on; I knew

that they were great drops of rain and *not* tears pattering down upon me where I lay prone upon the ground; and I could recollect that the papers must not be lost; so I had kept my senses.

THE STORY OF THE QUIGRICH OR STAFF OF ST FILLAN.

THE recent acquisition of that curious medieval work of art called the Quigrich or crosier of St Fillan by the Society of Antiquaries of Scotland, and its final deposit in their National Museum at Edinburgh, is in itself an incident of more than ordinary interest. Apart from its historical associations, the 'Cogerach,' 'Coygerach,' or 'Quigrich,' as it is variously styled in writings of the fourteenth and fifteenth centuries, is unsurpassed in interest as a work of art of a class and period of which no other Scottish specimen is now known to exist. Briefly described, it is simply the massive silver head of a pastoral staff of the form peculiar to the Celtic Church in very early times. Its shape resembles that of the bent head of a walking-stick, with a slanting prolongation of the outer end. The lower part of the crook expands into a large bulbous socket, beautifully ornamented with interlaced knot-work. A ridge or crest, pierced with quatrefoils, rises from the socket, and is continued over the back of the crook, terminating in the bust of an ecclesiastic, probably meant for St Fillan. The slanting front of the staff-head is ornamented by a large oval setting of cuirgorm, and the terminal plate has an engraved representation of the Crucifixion. The body of the crook is covered with lozenge-shaped plaques of filigree-work in floral scrolls.

What may be termed the private history of the crosier commences in the early part of the eighth century, when as the *bacul* or walking-staff of St Fillan, it accompanied him in his missionary journey to the wilds of Glendochart. The saint came of a royal race. His mother, Kentigerna, was a daughter of the king of Leinster; and both she and her brother St Comgan are enrolled among the saints of Celtic Alba. Placed often in the darkest and wildest districts of the country, solely with the view of reclaiming the people from paganism and diffusing the benefits of Christian civilisation, these monastic churches were truly centres of light and progress. Such was the famous church of Columcille at Hy. Such also was the monastery of St Mund at the Holy Loch, where St Fillan spent part of his days, and in which he succeeded the founder as abbot. Growing weary of its comparatively peaceful life, he sought a desert for himself in the wilds of Glendochart, where he might reclaim a new garden for the church, and close his days among an ecclesiastical family of his own uprearing. As founder and first abbot of Glendochart his memory would be fondly cherished by the community of clerics over whom he had presided. Their veneration would increase with time, as the traditions of his saintly life became fixed by constant repetition; and there

was no object around which that veneration and these legends could more appropriately cluster than around the staff which was the symbol of his abbatial office, and the lasting memorial of his presence among them.

Not the least interesting of the many picturesque associations which gather round the crosier of St Fillan is that which connects it with Scotland's warrior-king, Robert Bruce, and assigns to it a prominent part in the great struggle for Scottish independence that culminated in the glorious victory of Bannockburn. There is no evidence on record by which we can positively prove the presence of the crosier on the eventful field; but it is the tradition of the Dewars, its hereditary keepers, that it was there; and there is evidence that certain other relics of St Fillan were brought to the battle-field by the abbot of Inchaffray, the ecclesiastical superior of the church of Strathfillan, who was the king's confessor; and that this was done, if not by the king's express desire, at least in the knowledge that it would be consonant with his personal feelings and belief in their efficacy. If the narrative that was written by Boece is to be accepted at all, it must be accepted to the extent of establishing that there was a relic of St Fillan at Bannockburn. He calls it the arm-bone of the saint, and tells in his picturesque way that when the king, being sorely troubled in mind on the evening before the battle, had retired into his tent, and was engaged in prayer to God and St Fillan, suddenly the silver case which contained the arm-bone of the saint opened of itself, and showed him the relic, and then 'clakkit to again.' The priest who had charge of it immediately proclaimed a miracle, declaring that he had brought into the field only the 'tume cais' (empty case), being fearful lest the precious relic should fall into the hands of the English.

If we accept Boece's statement to the extent of believing on the strength of it that any of the relics of St Fillan were brought to the field, we may believe that they were all there, and that they were carried round the army on the morning of the fight, when the abbot of Inchaffray walked barefooted in front of the ranks bearing aloft 'the croce in quibhik the crucifix was hingin.' That such practices were not uncommon is gleaned from other instances, such as that of the crosier of St Columba—the *Cath Bhuaidh* or 'Battle-Victory'—so named because it used to give the victory to the men of Alba when carried to their battles. If then the crosier of St Fillan was present at the battle of Bannockburn, and the victory was ascribed to the saint's intervention, this may have been the occasion of its being glorified with such a magnificent silver shrine.

But if it had no public history and no picturesque associations, the story of its transmission from age to age, linked as it was with the chequered fortunes of the religious foundation to which it was attached, and of the strange and varied circumstances in which it has been preserved by a succession of hereditary keepers, through failing fortunes and changes of faith, in poverty and exile, is sufficient to invest it with surpassing interest.

Since its arrival at Edinburgh the singular discovery has been made that the gilt silver casing of the crosier had been constructed for the purpose of

inclosing an older staff-head of cast bronze. This has been taken out of its concealment, and is now exhibited alongside the silver one. The surface of this older crosier is divided into panels by raised ridges ornamented with niello. These panels correspond in number, shape, and size to the silver plaques now on the external casing, and they are pierced with rivet-holes which also correspond with the position of the pins by which the plaques are fastened. It is thus clear that when the old crosier was incased, it was first stripped of its ornamental plaques of filigree-work, which were again used in making up the external covering so far as they were available. Such of them as had been either entirely absent, or so much worn as to require redecoration, were renewed in a style so different from the original workmanship, as to demonstrate that it is a mere imitation of an art with which the workman was unfamiliar. This establishes two distinct phases in the history of the crosier, and suggests that at some particular period, a special occasion had arisen for thus glorifying the old relic with a costly enshrinement. What that occasion was may be inferred from some considerations connected with its public history.

We know nothing of the history of St Fillan's foundation during the first five centuries, in which the founder's staff passed through the hands of his various successors as the symbol of office of the abbot of Glendochart. But in the time of King William the Lion, we find that the office had become secularised, and the abbot appears as a great lay lord, ranking after the Earl of Athole, and appointed alternately with him as the holder of the assize, in all cases of stolen cattle in that district of Scotland. Whether he held the crosier in virtue of his office we cannot tell; but the likelihood is that it was when the office was first usurped by a layman, that the crosier was placed by the last of the true successors of St Fillan in the custody of a 'dewar' or hereditary keeper, with the dues and privileges which we afterwards find attached to this office. Such an arrangement was not uncommon in connection with similar relics of the ancient Celtic church. We thus find the dewar of the Cogechach of St Fillan in possession of the lands of Eyich in Glendochart in 1336. In process of time the official title of dewar became the family surname of Dewar; and we have a curious instance of the Celtic form of the patronymic in a charter granted in 1575 by Duncan Campbell of Glenorchy to Donald Mac in Deera vic Cogechach.

The inquiry is naturally suggested why a relic with such associations, intrinsically so valuable, and always so highly venerated, should have been allowed to remain in the possession of laymen, and to be kept in their private dwellings, often no better than turf cottages in the glen. The crosier was splendid enough to have graced the processional ceremonials of the highest dignity of the Church, and thus to have been a coveted acquisition to the richest monastery in the land. That it was so coveted may be fairly inferred from the fact that on the 22d April 1428, John de Spens of Perth, Bailie of Glendochart, summoned an inquest of the men of Glendochart to hold inquisition regarding the authority and privileges of 'a certain relick of St Felane called the Cogechach.' Of the fifteen summoned, three were Macnabs,

deriving their origin from the son of a former abbot; three were of the clan Gregor; and one was named Felan, after the saint. Their verdict sets forth that the Coygerach was in the rightful possession of the deoire, because the office of bearing it had been given hereditarily by the successor of St Fillan to a certain progenitor of Finlay, the deoire at the time of the inquest; that the privileges pertaining to the office had been enjoyed and in use since the days of King Robert Bruce; and that when cattle or goods were stolen or taken by force from any inhabitant of the glen, and they were unable to follow them from fear or feud, the dewar was bound to follow the cattle or goods wherever they might be found throughout the kingdom.

We hear no more of the rights of the Cograch till 1487, when the dewar sought the sanction of the royal prerogative to aid him in holding his charge with all its ancient rights. In that year, King James III. issued letters of confirmation under the Privy Seal, in favour of Malice Doire, who, as the document sets forth, 'has had a relic of St Felan called the Quigrich in keeping of us and our progenitors since the time of King Robert Bruce, and of before, and has made no obedience or answer to any person spiritual or temporal in any thing concerning it, in any other way than is contained in the auld infetment granted by our progenitors.' The object was to establish the rights of the Crown in the relic, as distinguished from the rights of the Church; and we may presume that the royal infetment to which it refers may have been granted by Bruce on the occasion when the old crosier was glorified by incasement in a silver shrine, in token of the king's humble gratitude to God and St Fillan for the victory of Bannockburn.

We find traces of the dewars and their lands in charters down to the time of Queen Mary. The Reformation deprived them of their living, and converted the relic, of which they were the keepers, into a 'monument of idolatry,' fit only to be consigned to the crucible. Still they were faithful to their trust, although instead of emolument it could only bring them trouble. In the succeeding centuries their fortunes fell to a low ebb indeed. In 1782 a passing tourist saw the Quigrich in the house of Malice Doire, a day-labourer in Killin. His son, a youth of nineteen, lay in an outer apartment at the last gasp of consumption; and the traveller was so moved by concern for the probable fate of the Quigrich, in the prospect of the speedy death of the heir to this inestimable possession, that he wrote an account of the circumstances, and transmitted it, with a drawing of the crosier, to the Society of Antiquaries of Scotland. At that time the Society could not have acquired it; but fortunately their intervention was not necessary for its preservation. On the failure of the older line, by the death of this youth, the relic passed into the hands of a younger brother of Malice Doire's. His son removed to Glenartney, where the Quigrich was again seen by Dr Jamieson, and was described by him in his edition of Barbour's *Bruce*. Archibald Dewar removed from Glenartney to Balquhiddy, where he rented a sheep-farm; but having suffered heavy losses at the close of the French war in 1816, he emigrated to Canada, where he died, aged seventy-five.

His son, Alexander Dewar, the last of the hereditary dewars of the Crosier, is a hale old man of eighty-eight, in comfortable circumstances, the patriarch of a new race of Dewars, rejoicing in upwards of thirty grandchildren, and nephews and nieces innumerable. It is in consequence of his desire to see the ancient relic returned to Scotland before he dies, and placed in the National Museum at Edinburgh, 'there to remain in all time coming for the use, benefit, and enjoyment of the Scottish nation,' that the Society of Antiquaries has been enabled, partly by purchase and partly by his donation, to acquire the Quigrich, the most remarkable of all existing relics associated with the early history of the Scottish nation.

It was five centuries old before the light of authentic record reveals it in 1336 in possession of the dewar Cograch, and since then it can be traced uninterruptedly in the line of the Dewars for five hundred and forty years. 'Its associations with the Scottish monarchy,' says Dr Daniel Wilson, 'are older than the Regalia, so sacredly guarded in the castle of Edinburgh; and its more sacred memories carry back the fancy to the primitive missionaries of the Christian faith, when the son of St Kentigerna, of the royal race of Leinster, withdrew to the wilderness of Glendochart, and there initiated the good work which has ever since made Strathfillan famous in the legendary history of the Scottish Church.'

Cousin Dick.

Mr and Mrs Woodford were enjoying a confidential matrimonial chat over their *tête-à-tête* dessert, and discussing at some length the antecedents and probable future of a cousin, Mr Richard Broughton, who had lately dropped down on them, not from the clouds, but from a Liverpool express train. This gentleman had in his youth been 'crossed in love.' Always a musical enthusiast, he had become attached to an amiable girl, a young concert-singer, who was the main stay of her mother—the widow of a captain in the army—and some younger sisters; and having himself not yet made a fair start in life, the elders of both families rose up in arms against the alliance.

Mrs Woodford, of nearly the same age as her Cousin Dick, had been his confidante in their boy and girl days, had sympathised warmly with his disappointment, without very precisely understanding how it had come about, and was now assuring her husband that the attachment had been a far more serious affair than very youthful fancies commonly are. It was true the gentleman had so far consoled himself as to marry another lady; though it was reported he had wedded a shrew, who had not made him supremely happy. But he lost his wife some time before leaving Australia; and now, after a sojourn of nearly twenty years in the colonies, had returned to England with something more than competence.

'But what became of Miss Clifton?' asked Mr Woodford.

'That I do not know,' returned the lady. 'Clifton was only her professional name; her real one I quite forgot; therefore if from any circumstances she passed into private life, it would not be easy to track her. Dick only called her Alice to me.'

'Probably she also married,' said Mr Woodford.

'Possibly,' replied his wife; 'though women are more constant than men; and though she ceased to answer Dick's letters, and really brought him to a state of misery which drove him out of England, I never thought the fault was quite her own.'

While Mrs Woodford was yet speaking, there was a knock at the door, and Mr Broughton was announced.

'Why did you not come to dinner?' cried Mr Woodford, rising to greet the visitor. 'But we can have the lamb brought back,' he added.

'Thanks, thanks,' said Mr Broughton; 'but I dined at the hotel. I am sure I ought to apologise for calling at such a time, and for having brought Dandy with me.'

Dandy was a terrier, and his master's almost inseparable companion.

'Now Dandy, behave!' continued his master; 'and go and beg pardon for both of us. Say we know we are two unmanly colonial bores, at present unfit for good society.'

Very much as if the sagacious animal understood every word of this address, he approached Mrs Woodford, and sat on his haunches in a begging attitude.

'He means biscuit,' said the lady with a laugh, and suiting the action to the word by giving him one, with a caressing pat into the bargain.

'Seriously, however,' said Mr Broughton, 'I would not have come at such an hour, but I wanted so much to tell you that at last I have found lodgings which I think will just suit me. Or rather I should say that Dandy found them for me.'

'Dandy! Well, he is a clever dog! He will talk next, I suppose. But,' continued Mrs Woodford, 'at present his master must explain.'

'It sounds ridiculous perhaps to tell of such trifles,' replied her cousin; 'but for the last three or four days—ever since the hot weather set in, I have felt quite interested in a shop in your neighbourhood—mainly, I think, from the humanity displayed by the owner in setting a large bowl of sparkling water by the door for the convenience of the poor panting dogs, for which Dandy has been grateful more than once. It is a music warehouse on a small scale; but where they also sell fire ornaments and ladies' Berlin work and so on'—

'I know the shop,' interrupted Mrs Woodford; 'it is kept by a widow and her maiden sister, who seem very superior people.'

'Oh, I am glad you know the place,' continued Mr Broughton. 'Well, this afternoon as usual I waited, looking in at the shop window, while Dandy quenched his thirst, and wishing I could decide on something to purchase, by way of liquidating my dog's debt, when I observed a card which intimated there were apartments to let. There were directions to knock at the private door; but seeing me linger on the spot longer than usual, Dandy had entered the shop, and when I followed to look after him, I saw him planted firmly near an inner door, and accepting the caresses of a little girl of about seven years old as if he had known her all his life. I made inquiries about the apartments, and found they consisted of the first floor, a nice bedroom, and pleasant sitting-room; attendance with good cooking guaranteed, and no other lodgers taken. Of course I went upstairs to look at the rooms, Dandy leading the

way with the canine gravity which you remarked in him the other day. He jumped on a chair to look out of the window, and then on the sofa, as if to examine the softness of the cushions, and finally gave a little yelp, which was only half a bark, and which seemed to say: "Master, this will do; here we are quite at home." Even the mistress of the house, Mrs Gray, laughed at the evident contentment of the dog. But what charmed me was there was no rebuke for my poor Dandy's jumping on the furniture; and remembering besides the bowl of water, I felt inclined to believe that Dandy would be something more than tolerated in the house. Accordingly it was with a good hope that I intimated that my dog was my constant companion, and that I trusted his presence would not be objectionable.'

'O sir,' said the widow, 'we have only lost a dear old dog within these three months; and for our own poor pet's sake—if for nothing else—we should be kind to a dog. As for my children, I believe they take after their aunt; and my sister dotes upon dogs.'

'Ah, it was the maiden sister, I daresay, who was the mistress of the lamented dog,' exclaimed Mrs Woodford. 'I have some recollection of seeing a very old black retriever in the shop.'

'No doubt it was the same. I understand the sister gives music lessons; though at present she is taking a little holiday, staying at the seaside with friends. There is another advantage in these lodgings,' continued Mr Broughton; 'the house being a music warehouse, and one of the family evidently musical, I am in hopes they will not object to my violin-practising any more than to Dandy for an inmate. What I want now is comfort, to enjoy myself after my own fashion, and opportunity of doing some little good in the world, when what seems to me the fitting occasion offers. Five years more at the Antipodes and I might have come home a richer man; but perhaps in that time health would have been shattered by over-toil, and I should have been less able even than now to turn into new grooves of life and resume habits of culture. As it is, my means are ample for all I am likely to want. With books and music and Dandy, I expect to get on capitally. Besides I mean to come and see you pretty often.'

'Indeed I hope you will,' ejaculated husband and wife together.

'If we come too often, they must turn us out—must they not, Dandy?' said Mr Broughton, speaking to and petting his dog; and then he added, turning to his cousin: 'By-the-bye, I ventured to give you as a reference as to my respectability, responsibility, &c.'

'And I will give you a good character, Dick, I promise you,' replied Mrs Woodford; 'and what is more, I will recommend Dandy to Mrs Gray's special regard. He certainly is the cleverest dog I ever saw. Look at him now, wagging his tail at me, as if he understood every word I was saying!'

'Spoken just like the Cousin Maggie of early days,' said Mr Broughton, with a certain tremor in his voice which proved that his feelings were touched. 'Always full of sympathy and thoughtful kindness. Yet even you can hardly tell what a friend Dandy has been to me through years of loneliness.'

'Yes, I can, Dick,' said Mrs Woodford; 'if I had not a pack of children to think about, I am quite sure I should want dogs or four-footed pets of some sort.'

Only a fortnight has passed, but 'Cousin Dick' seems as completely installed in his new lodgings as if he had occupied them for months. His most cherished personal belongings were all unpacked and arranged about his rooms according to his own taste and fancy. A few well-worn books which he had taken from England in his youth, still held a place of honour, though they were now flanked by many fresher-looking volumes; and an old and cherished violin rested in one corner, and helped to give the sitting-room its inhabited look, though writing materials near the window and newspapers lying about, contributed to the effect.

Over the mantel-piece in his bedroom he had arranged his store of warlike weapons—a sword, which Richard Broughton had certainly never used, but which he valued as the gift of a dead friend; pistols and revolver which he had looked on as protectors in many a perilous journey, and a boomerang, brought to England as a curiosity.

Mr Broughton had finished his breakfast, and was enjoying his morning newspaper; but he had been to the opera the night before, and the melody of an air which had delighted him still haunted his ear, and even disturbed the rhythm of the very didactic leading article he was reading. He was not much disturbed by Mrs Gray's knocking at the door; she came, as she usually did every morning, to receive his orders for dinner.

'You manage my dinners so nicely for me,' said Mr Broughton in answer to some suggestion of his landlady, 'that I think I cannot do better than leave all arrangements to you. But do sit down; I want to thank you for taking care of my dog last night. I hope he was not troublesome to you?'

'Not in the least,' returned Mrs Gray; 'when once he ascertained that you really were not in the house, he settled down quietly, and played with the children till they went to bed.'

'I am so glad your children are not afraid of him,' observed Mr Broughton.

'Oh, they are too well used to a dog and to pets in general to be afraid of a gentle creature like your Dandy. In fact my difficulty is keeping them out of your rooms. Ally—you remember how Dandy took to her from the very first—Ally wanted to come in and see the dog just now. I daresay she is near the door still.'

'Oh, pray let her in,' said Mr Broughton, himself rising to open the door. 'I will not be jealous because it is my dog she wants to see—not me; and there was a little laugh at the idea of Dandy being such a favourite.'

When the room-door opened, sure enough little Ally was found waiting, but not alone; her brother, a curly-headed urchin two years her junior, had hold of her hand; and both were evidently in expectation of being allowed some little frolic with the dog.

'Come in, my dears—come in,' exclaimed Mr Broughton; 'Dandy will be most happy to see you, and will shew you some of his accomplishments, if you like.'

Though a little shy at first with the 'strange gentleman,' whom they had been taught in a vague

sort of way to reverence, and for whose comfort they were told to refrain from noise, the shyness soon wore off, when they found that Dandy's master was as willing to be their playmate as Dandy himself. For their delectation the dog went through his most admired tricks: he jumped over a stick, he allowed of mimic shooting and acted the dead dog, he begged for a piece of bread, but could not be induced to eat it till assured it was paid for. Moreover, he howled a note in unison with one his master played on the violin; but probably without meaning to imply admiration of the latter performance.

A less keen observer than a fond and widowed mother was likely to be, might, if contemplating this little scene, have felt pretty sure that fond as Richard Broughton was of his dog, it had not exhausted all his capacity of loving. By people who have never had their hearts thrill to the mystery of canine attachment he had often been ridiculed for the intensity of his affection for Dandy, and when he spoke of a 'dog's love' as being the only ideal of his life that had ever been fully realised, few persons understood him. But Mrs Gray saw at a glance that he had a natural love for children, and probably for all helpless creatures, and considering all the circumstances of her household, she thought herself most fortunate in her lodger.

It is astonishing how soon pleasant habits may be formed. Before the next week had passed it became quite the custom of the children to come into Mr Broughton's rooms at least once a day, ostensibly to play with Dandy; but also they brought their toys to shew to Dandy's master, and chattered away, as bright, eager, fresh-hearted children are pretty sure to do with those whom, by some subtle instinct, they at once recognise as friends. Dandy's canine predecessor in the house, the much lamented Topsy, was a frequent subject of conversation. Her accomplishments were described, though admitted to be fewer than Dandy's, and her death and burial dwelt on with some pathos. And one day little Ally came into the room hugging a thick photographic album in her arms. She had brought it for the express purpose of shewing poor Topsy's likeness.

Topsy had been photographed a number of times: once cosily curled up on a mat; once occupying an easy-chair with something of the dignity of a judge; another time as a conspicuous member of a group; and lastly by the side of a lady who had her hand on its head.

'And who is the lady?' inquired Mr Broughton, trying to speak with a calmness he did not quite feel. 'It does not look like your mother.'

'O no! Why, it is auntie!' exclaimed little Ally in a tone which implied wonder that he could for a moment have taken it for Mrs Gray.

'Then Topsy was fond of auntie, and auntie was fond of Topsy, I suppose?' said Mr Broughton, wishing to discover all he could about this auntie.

The little girl nodded her head by way of reply, and then she said: 'Auntie did cry so much when Topsy died. She was auntie's own doggy.'

'And did you cry?' asked Mr Broughton.

Another nod of the head; but the child exclaimed: 'Not so much as auntie—auntie cried till her eyes were quite red.'

'And is this portrait very like auntie?' asked Mr Broughton.

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'And what is auntie's name?' inquired Mr Broughton with forced composure.

'Auntie!' said the little girl, as if the word were quite sufficient; but added a moment after, as if the thought of more information being required had just come to her: 'She is Alice, and I am Alice; only they call me Ally. Auntie is so good,' the child continued; 'mother says she is the best auntie that ever lived. And I must try to be good too, because I have got her name.'

'Quite right, my darling,' said Mr Broughton, giving the child a fatherly kiss. 'But run away now, for I have letters to write. Will you leave me the album; I should like to look at Topsy again—though I don't think she was much like Dandy. Do you?'

'Not a bit!' cried the child, tripping off gleefully, and leaving Mr Broughton with his heart stirred in a manner it had not been for many years.

It was true that he had letters to write, but it was half an hour before he took pen in hand. The first thing he did was to draw forth a powerful magnifying glass, and by its means to study the face of the lady with the dog most narrowly. Yes; he had not a shadow of doubt that this dear 'auntie,' the maiden sister of Mrs Gray of whom he had heard, was the love of his youth, the Alice Clifton of the concert-room, the Alice Croft of private life. Photography revealed some lines of care and suffering that had not belonged to the fair young face he so well remembered; but such foot-prints of time must be expected in the course of twenty years, even under happier circumstances than had probably befallen the woman in question. That she should have relinquished her professional career without having married, puzzled him. But he had incidentally heard from the children that 'auntie' was coming home to-morrow; and before many days should pass, he would certainly find out a thing or two which must greatly influence his future.

As if to confirm his already strong belief beyond the power of even momentary cavil, the next time he went down-stairs he observed a letter on the hall table, which, on looking if it were intended for himself, he saw was addressed 'Miss Croft.'

The next day Alice Croft returned home; and as Broughton was taking his coffee, he could hear the children's merry shouts of welcome, at which, by-the-bye, Dandy set up a short bark, as if he thought he too had a right to join in the demonstration.

'I will do nothing hurriedly,' thought Mr Broughton to himself; 'after twenty years of separation I can wait for a few days surely. After all, if we meet on the stairs she will not recognise in me the slim smooth-faced boy I believe she remembers.' And thinking thus, he glanced at himself in the chimney-glass, noting the bronzed weather-beaten face and long thick beard streaked with white that it reflected. 'I wonder, though, if my name will strike her?' he continued, pondering. 'Perhaps not; and yet it may.'

Now the fact was, Alice Croft had not as yet

heard the new lodger's name; for her sister had at first misunderstood it, and had written it 'Rawton' in communicating the news that the rooms were let. Three or four days passed away before Alice had any inkling of the mistake. Meanwhile Richard Broughton had seen her—unseen himself—more than once; and had even heard her voice speaking caressingly to the children. How it thrilled on his ear and confirmed his resolution!

It was the early twilight of a summer evening. The shop was closed, and Mrs Gray had gone out after seeing the children in bed. Broughton felt that the hour was come, and, ringing his bell, asked the servant who answered it if Miss Croft were at home and disengaged.

'Yes, sir,' said the maid; 'she is all alone in the parlour.'

'Then be so good as to give her my card, and ask if I may wait upon her.'

But Mr Broughton followed the servant down-stairs, and was ready to avail himself of the permission given, in a minute.

The servant thinking it her duty, lighted the gas before leaving the room; but she left it burning low, so that the lingering daylight prevailed over it. Though the reception-room was but a little parlour behind a shop, there was an air of refinement about its appointments, and the outlook into a mere yard was masked by a balcony full of blooming and odorous plants. The door which led into the shop remained open, probably for the sake of air; but to such a passionate lover of music as the visitor was, the sight of two or three pianos and a harp and guitar was rather suggestive of delightful ideas than of anything else.

Alice had risen from her chair, and advanced with outstretched hand to meet her guest; but she did not seem able to find a word of greeting.

'Alice!' exclaimed Mr Broughton, 'if I may still call you so, do I seem like one risen from the dead?'

'O no,' she replied; 'I never thought you were dead.' But as she spoke there was a faltering of her voice which shewed that she was agitated.

By this time both were seated, though a little way apart. Mr Broughton drew his chair nearer, and said softly: 'Alice, I come to ask you if it is too late to mend our broken chain?'

'But you are married; I heard that long ago,' exclaimed Alice with dignity. 'You have no right to allude to the past.'

'I have been a widow these two years,' was the rejoinder.

The explanations which followed need not be described in detail.

Letters kept back, false messages,

The tale so old and dark,

had separated the lovers; and when Alice Croft believed that she was forsaken, a severe illness ensued; after her recovery from which, it was found that her voice was seriously impaired. Instead of resting it for a time, she was tempted by the exigencies of her profession to overstrain it; the result being such a deterioration in its quality that it was no longer powerful and certain enough for the concert-room. Then followed many years of arduous labour as a teacher of music; during which time her mother's death and the death of other members of the family reduced the little

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As if to confirm his already strong belief beyond the power of even momentary cavil, the next time he went down-stairs he observed a letter on the hall table, which, on looking if it were intended for himself, he saw was addressed 'Miss Croft.'

The next day Alice Croft returned home; and as Broughton was taking his coffee, he could hear the children's merry shouts of welcome, at which, by-the-bye, Dandy set up a short bark, as if he thought he too had a right to join in the demonstration.

'I will do nothing hurriedly,' thought Mr Broughton to himself; 'after twenty years of separation I can wait for a few days surely. After all, if we meet on the stairs she will not recognise in me the slim smooth-faced boy I believe she remembers.' And thinking thus, he glanced at himself in the chimney-glass, noting the bronzed weather-beaten face and long thick beard streaked with white that it reflected. 'I wonder, though, if my name will strike her?' he continued, pondering. 'Perhaps not; and yet it may.'

Now the fact was, Alice Croft had not as yet

heard the new lodger's name; for her sister had at first misunderstood it, and had written it 'Rawton' in communicating the news that the rooms were let. Three or four days passed away before Alice had any inkling of the mistake. Meanwhile Richard Broughton had seen her—unseen himself—more than once; and had even heard her voice speaking carelessly to the children. How it thrilled on his ear and confirmed his resolution!

It was the early twilight of a summer evening. The shop was closed, and Mrs Gray had gone out after seeing the children in bed. Broughton felt that the hour was come, and ringing his bell, asked the servant who answered it if Miss Croft were at home and disengaged.

'Yes, sir,' said the maid; 'she is all alone in the parlour.'

'Then be so good as to give her my card, and ask if I may wait upon her.'

But Mr Broughton followed the servant down-stairs, and was ready to avail himself of the permission given, in a minute.

The servant thinking it her duty, lighted the gas before leaving the room; but she left it burning low, so that the lingering daylight prevailed over it. Though the reception-room was but a little parlour behind a shop, there was an air of refinement about its appointments, and the outlook into a mere yard was masked by a balcony full of blooming and odorous plants. The door which led into the shop remained open, probably for the sake of air; but to such a passionate lover of music as the visitor was, the sight of two or three pianos and a harp and guitar was rather suggestive of delightful ideas than of anything else.

Alice had risen from her chair, and advanced with outstretched hand to meet her guest; but she did not seem able to find a word of greeting.

'Alice!' exclaimed Mr Broughton, 'if I may still call you so, do I seem like one risen from the dead?'

'O no,' she replied; 'I never thought you were dead.' But as she spoke there was a faltering of her voice which shewed that she was agitated.

By this time both were seated, though a little way apart. Mr Broughton drew his chair nearer, and said softly: 'Alice, I come to ask you if it is too late to mend our broken chain.'

'But you are married; I heard that long ago,' exclaimed Alice with dignity. 'You have no right to allude to the past.'

'I have been a widower these two years,' was the rejoinder.

The explanations which followed need not be described in detail.

Letters kept back, false messages,
The tale so old and dark,

had separated the lovers; and when Alice Croft believed that she was forsaken, a severe illness ensued; after her recovery from which, it was found that her voice was seriously impaired. Instead of resting it for a time, she was tempted by the exigencies of her profession to overstrain it; the result being such a deterioration in its quality that it was no longer powerful and certain enough for the concert-room. Then followed many years of arduous labour as a teacher of music; during which time her mother's death and the death of other members of the family reduced the little

circle, till at last her youngest and widowed sister Mrs Gray was the only one left.

Six weeks after the reunion just described, a quiet but well-omened wedding took place, in which Richard Broughton and Alice Croft were the principal actors. Meanwhile, the bridegroom and bride elect, living under the same roof, had had abundant opportunities of riveting the 'broken chain' to which allusion has been made; while Dandy, no longer confined to one apartment, now ran about the house, as if perpetually engaged in taking messages from one person to another. Mr and Mrs Woodford, early apprised of all that was going on, had made the acquaintance of Miss Croft and her sister, and being fond of children, had frequently had the little Grays at their house. Mr Woodford even consented to give the bride away, and his two young daughters were the bridesmaids. But as Broughton said, his cousin Maggie was always a 'trump,' and her husband seemed worthy of her.

It was the evening before the wedding. The whole family had been visiting the Woodfords, and it was evident that little Ally had something on her mind to communicate. The young Woodfords as well as their mother constantly called Mr Broughton 'Cousin Dick,' and the term had evidently struck the child much.

'What is it, Ally?' said Mr Broughton, drawing the little girl on to his knee. 'What is it you are wishing to say?'

'I should like to call you "Cousin Dick," like those young ladies. May I? for I love you so much.' And as she spoke, Ally raised her face for a kiss, and put her arms round his neck.

'Will not "Uncle Dick" do as well?' cried Broughton, giving the child a warm hug. 'Don't you understand that I shall be really Uncle Dick to-morrow?'

'Oh, how nice! Uncle Dick, dear Uncle Dick—yes, I like that better.'

N.B.—We are commissioned to add that Dandy accompanied the newly married pair on their wedding journey. They considered they owed him so much, that it would not be just to give him the pain of even a temporary separation from his master—and mistress.

A TRIP ON LAKE NYASSA.

As many of our readers will doubtless recollect, Mr E. D. Young, R.N., left this country in May 1875, with a small party, for the purpose of establishing the Livingstonia mission, and of placing a small steamer on Lake Nyassa, in the interior of Africa; he and his friends being moved thereto by an earnest determination to carry out one of the dearest wishes of the late Dr Livingstone. Mr Young has recently returned home; and on February 26th he delivered, before the Royal Geographical Society, an interesting account of what he did and what he saw on the Lake of Storms, from which we condense the following brief particulars.

We join Mr Young and his party at the Kongoné mouth of the Zambesi, where the sections of the little steamer *Itala* were screwed together; and

although an extraordinary flood, early in 1875, had altered the course of the rivers since her captain's previous visit, nothing materially impeded her passage to the foot of the Shiré cataracts. These falls extend for some seventy-five miles, and are a very formidable obstacle to navigation. In the distance named, the waters of Lake Nyassa leap down a staircase of rocks and boulders for some eighteen hundred feet; and before the traveller can reach the higher ground, he has to traverse a most rugged road. Want of porters, as a rule, is the most grievous obstacle to be overcome; but thanks to the kindly recollection existing among the natives of previous missionaries, Mr Young experienced no difficulty on this score; and in ten days the *Itala* was taken to pieces, and her sections, boilers, machinery, and stores were conveyed to the upper end of the cataracts. What, however, is thus told in a few brief words, involved very great toil; and Mr Young himself says that the carriage of the steel plates, &c., necessitated some of the most tremendous exertion he ever witnessed, which was much aggravated by the intense heat, in some places reaching one hundred and twenty degrees in the shade. We may certainly admit with him, that the men who did this four days' work for six yards of calico each (say one shilling and sixpence), finding their own food too, without a grumble or a growl, were not to be despised. The work of reconstruction was soon accomplished, and steam was up in a fortnight.

The little steamer entered Lake Nyassa at 7 A.M. on the 12th of October 1875. After examining several beautiful bays and inlets, which did not afford the necessary shelter for the vessel, Mr Young's party resolved to settle, at any rate temporarily, at Cape Maclear, whither, accordingly, they transported all their stores. On November 19th Mr Young set off on a voyage round the lake, in the course of which he discovered a large extension of its waters, hitherto unknown. Making his way northwards, he came in sight of the grand range which towers over Chiloweela; in places the mountains run sheer down into the lake, and no bottom could be got at one hundred fathoms. After weathering a furious gale which raged for thirteen hours, the *Itala* pursued her northward voyage, passing the islands of Likomo and Chusamoolo. On his right, Mr Young reports an iron-bound coast stretching everywhere, excepting only when some ravine came down to the shore. In one spot, there were evident signs of a dreadful massacre having taken place—the result of a slave-raid. Mr Young's account of what he saw here is curious and interesting. Hardly any wood, he says, was to be procured, in consequence of the forests being cleared, and the only remnant of a large population was now to be found on rocky patches jutting up from the water of the lake, and on singular 'pile villages.' It was found that the poor creatures had conveyed earth in their canoes to these rocks, and wherever a crevice afforded a hold, there would a little patch of cassava or corn appear, grown with infinite labour.

The platform villages reached by Mr Young were exceedingly interesting; for the most part they are built three or four hundred yards from the shore, and in from eight to twelve feet of water. Poles are driven down in rows, and on the top of

them a wooden platform is constructed, forming the foundation or floor of the village. To give some idea of the extent of these, it may be mentioned that one of them consisted of about one hundred huts. With an abundance of fish round them, the islanders hold their own against starvation. Shortly after leaving these strange villages, Mr Young met with some scenery, the description of which is worth quoting. 'We were now abreast,' he says, 'of some mountains that amongst the parallel ranges which virtually make a mountain-basin of Lake Nyassa, exceed them all in stupendous grandeur. In no part of the world have I seen anything to equal their peculiar magnificence. With peaks apparently from ten to twelve thousand feet high, they run perpendicularly down into the lake. The rain was pouring upon them, and numberless waterfalls hung like threads of white floss-silk from crevices which ran out upon their sides far up among the clouds. Baffled by the raids of the Ma Viti in 1866, Livingstone could not induce his men to go with him to the north end of Nyassa, and thus he missed seeing that which would have struck him as the most beautiful feature of "his old home," as he called the lake. There was but one name to give to these mountains. At its northern end they stand like portals to the lake, faced by the opposite mountains; and as future travellers look upon the "Livingstone Range" it may aid them to remember the man who during his life, more than any other, added to our knowledge of the hitherto unknown beauties of the earth.'

A violent storm, more like what might be expected on the Atlantic than on an inland sea, prevented Mr Young from doing much in the way of exploring the unknown region at the end of the lake; but he saw there what he believed to be the mouth of a wide river; and this opinion was confirmed by what he learned from the natives when he next landed after the storm referred to. They averred that a River Rovuma or Rôoma flows out at the extreme north; and he inclines to believe this to be the case for the following reasons: In the first place, Dr Livingstone heard the same story twenty years ago, when he discovered the lake, and in quite a different quarter. It will be remembered by many how sanguine he was that the Rovuma River, which debouches on the east coast, was identical with the Nyassa River, and that it would prove to be a second outlet. It may yet prove to be so; but the discovery can be of little use, for the Rovuma ceases to be navigable a short distance from the coast. The second reason for believing the native report is, that in the stormy time, when Mr Young was there, it was very easy to see where rivers ran into the lake. A long current of muddy water would trail out on the dark-blue surface; in this case, however, there was nothing of the kind; and it is consequently tolerably clear that no inflow exists.

Cruising southwards along the western shore of the lake, Mr Young observed, instead of the iron-bound coast on the opposite side, exquisite park-like glades between the mountains and the water's edge; the herds of game merely looked up as the steamer passed, just as sheep raise their heads to gaze at a train, and then went on browsing. In one place a remarkable detached, perpendicular rock stands four thousand feet high. The top is flat, and the sides give it the appearance of a

pyramid from which a large slice of the top has been removed in order to place in position a perfectly square block of a greenish colour. Beneath this singular summit there is a deep horizontal band of white stone or quartz, succeeded by another of clay apparently; and then comes one of intense black, possibly coal, for this mineral is known to all the natives.

Mr Young's story of his cruise furnishes undeniable evidence of the justness of the name Dr Livingstone gave to Nyassa, namely the Lake of Storms, for he has constantly to record meeting with them—one more terrible than the other. The last he mentions must have been fearfully and awfully grand in its wildness. 'At one time,' he says, 'in the middle of a thunder-storm of great fury, no fewer than twelve water-spouts appeared around us, and we had literally to steer hither and thither to avoid them, for had one overtaken us, it would have sent us to the bottom without a doubt.'

Such are the salient features in Mr Young's brief account of the first trip made by a steamer on the stormy bosom of Lake Nyassa. It did not come within the scope of his paper to describe the daily life of the missionary party at Cape Maclear, the insight they got into the native life, the intrigues of the slave-traders, nor the marvellous effect which the presence of Europeans produced on all sides, more especially in attracting to them from the four winds the scattered remnants of villages swept away by slave-raids; but it will be interesting to our readers to state in conclusion, that he hopes to preserve these details for the public in another form, which we feel sure will meet with the welcome it cannot fail to deserve, as the record of the establishment of the first British colony on Lake Nyassa.

CURIOUS PICK-UPS.

THE pick-ups, the findings, from underground or under-sea, or in hidden places above ground, comprise a strange medley of the odd and the choice, appealing to the tastes or the pockets of persons filling widely diverse positions in society.

The drains and sewers, for instance: can a more lowly and uncomfortable treasure-house than these be found? Rat-killing by dogs, in an enclosed space surrounded by the roughest of roughs, is a savage exhibition unfortunately not yet quite died out from amongst us. The exhibitors purchase the live rats at so much per dozen from men who grope along the filthy sewers in search of them; and in Paris especially, dead rats are brought up from the same unseemly regions, and placed in the hands of skinner and tanners, who manage to get out of them strong and good-looking pieces of leather suitable for the manufacture of gloves. The great changes made in recent years in London by the extensive Main Drainage Works have deprived the sewer-grubbers of much of their chance; but in the old sewers the pick-ups were often strange enough. Dead infants, a dead seal, cats and dogs both alive and dead, spoons, tobacco-boxes, children's playthings, bad half-crowns and shillings, sets of false teeth, washing-bowls, mops, human heads and limbs which had been thus

disposed of by body-snatchers or by anatomical and medical students—all were met with by the sewer-flushers. One party of these strangely employed men came on a certain occasion to a spot where the brickwork between the sewer and a beer-cellar had broken through. What did they do? They helped themselves.

On a former occasion, we presented a few illustrations of the curious operation of the law concerning *Treasure-trove*, the rights and the wrongs of ownership connected with property picked up from the ground or from a small depth below the surface. Among the examples cited was one relating to the finding of treasure near Stanmore in Middlesex, and another connected with the locality of Mountfield in Sussex. Let us present a few jottings of similar pick-ups in more recent years.

A labourer, digging a drain in a farm on the estate of the late Lord Palmerston, found a golden torque or torse, an ancient British necklace. It was ascertained that the original grant of the estate gave to the grantee, as lord of the manor, a right to all treasure-trove found therein; the veteran statesman established his claim, but took care that the finder should not go unrewarded. A ploughman, working near Horndean in Hants, found more than a hundred old silver coins in an earthen jar under the surface of the ground; the lord of the manor gave to the finder the intrinsic value of the coins as mere silver, and then had to fight a battle with the Crown as to who ought to possess the coins themselves. One find near Highgate was very remarkable, on account of the strange manner in which the veritable owner made his appearance. Labourers, grubbing up a tree in a field, found two jars containing nearly four hundred sovereigns; they divided the money amongst themselves, and were then taken aback by the lord of the manor claiming it. Before this claim could be investigated, a tradesman came forward and stated that one night, under a temporary delusion, he had gone out and buried the money; when he awoke, and for some time afterwards, he tried in vain to recollect the locality he had selected, and only obtained a clue when he heard a rumour of the finding of four hundred sovereigns. He was able to bring forward sufficient evidence in support of his singular story; and his claim was admitted.

On different occasions in 1864 the Crown put in claims for treasure-trove—a gold coin found at Long Orendon in Buckinghamshire; sixty-two gold coins found in an earthen jar in a field at Stockenton, Leicestershire; no less than six thousand silver pennies of the time of Henry III. found at Eccles near Manchester; and seven hundred and sixty silver coins earthed up near Newark. The next following year gave the Crown a claim to a hundred and eighty silver coins of the reigns of Mary, Elizabeth, James I., and Charles I., found at Grantham; and to a gold cross and chain brought to light at Castle Bailey, Clare, in Suffolk. The years 1866 and 1867 were

marked, among other instances, by the finding of nearly seven thousand small gold and silver coins at Highbury, near London; eighty guineas concealed in the wall of an old house at East Parley, near Christchurch, Hants; and two hundred and sixty old silver coins in a house at Lichfield. In other years there were nine hundred silver coins found at Cumberford in Staffordshire; and eleven rose nobles found in the cloisters of Westminster Abbey. These several instances of treasure-trove were settled in various ways. Some of the findings were returned by the Crown to the finders; some were sold to the British Museum, in a manner to place an honorarium in the finder's pocket; some were presented to museums, and the money value given to the finders; some are retained by the Crown, as antiquarian curiosities; while one has been handed over to the descendants of a former owner.

Seven or eight years ago two labouring men found a very ancient gold chain, which they sold to a dealer who knew the value better than they did; the unlucky-lucky men fared badly in this instance, seeing that they were punished for selling the 'find' without giving notice to the authorities—rather hard lines for rustics, who are not likely to know much about the law of treasure-trove. In another case a poor man found a pair of ancient Irish silver bracelets; he sold them as old silver to a silversmith, who melted them down at once—to the great regret of an antiquary, who would have given much more than their intrinsic value for such relics of former days. During the multifarious diggings which have been going on for some years in and near Cannon Street and its neighbourhood for the formation of new streets and the construction of large commercial buildings, the workmen lighted upon twenty-nine guineas and twenty shillings nearly two centuries old; the men got into trouble because they did not voluntarily give them up. On one occasion when the dusty and musty contents of a rag-dealer's heap were being overhauled, somewhere in the neighbourhood of Houndsditch, a diamond ring was cepied. A contest arose as to who should possess it: a woman engaged in sorting the rags claimed it because she had found it; the rag-dealer disputed her claim; a pawnbroker who said he had advanced money on the ring insisted on his prior right; a dealer in old clothes who had sold a garment for that money, and one or two other persons of somewhat doubtful antecedents—all came forward to shew that, for some reason or other, the diamond ring ought to be considered theirs. Whether the crown waived its claim, we are not certain; but a magistrate eventually gave a decision in favour of the rag-sorter.

Bank-notes, as well as coins, jewellery, and articles in the precious metals, sometimes make their appearance among the findings. A bundle of notes was one day picked up outside the counter of a retail shop: the finder claimed them because he *saw* the finder; while the shopkeeper claimed them because it was on his premises that the notes had been dropped. The real owner, whoever he may have been, did not come forward, and the law decided in favour of the finder. But a much more remarkable case occurred two or

three years ago. A packet containing no less than ten thousand pounds' worth of bank-notes was picked up from the pavement in one of the busy streets near the Bank of England; ten notes of one thousand pounds each. A young City clerk picked up and pocketed the treasure. A friend advised him, on consultation, to keep the notes until the following day, when a handsome reward would possibly be offered by the luckless person who had inadvertently dropped the notes. A firm of solicitors, in the names of the real owners, speedily offered one hundred pounds to the finder. The judicious friend overshot the mark here; he stipulated that he should have nearly half the sum of one hundred pounds as his reward for the advice given; and at the same time coaxed sixty pounds out of the owners by a fabricated story concerning himself, the finder, and the finding. A sheriff court had to decide the matter, and ordered the 'friend' to return part, at any rate, of the money he had received.

A queer story has lately found its way into the newspapers, not exactly touching on the discovery of treasure, but on a concealment which might possibly lead to discovery if this or that were to occur. One Adolfo de Garcilano (so runs the story), a prisoner in Madrid, and lately a colonel in the Carlist army, was instructed by Don Carlos to take six million pesetas (about one franc each) in English securities and Spanish notes to London, inclosed in an iron box. This treasure he was to bury in the earth in a particular locality, make a sketch of the exact spot, and return to Spain. He was next captured by the Alfonsists, thrust into prison, and told that he would not be set free except on the payment of a large sum of money by way of ransom. Thereupon he wrote to some one in England or Scotland, asking for the transmission of a sufficient sum of money; this done, the secret of the buried treasure would be communicated to the liberal ransomer, who was to retain one-third of it as a grateful reward. If there had been only one such letter, some person might possibly have been victimised; but there were more than one, to different quarters, each requesting the money to be sent to a third party at an address named. We may hereby form a tolerably true estimate of Don Adolfo de Garcilano.

Undoubtedly the most interesting recent discoveries of small but valuable works in the precious metals are those due to Dr Schliemann. Archaeologists have long recognised the probability that buried beneath some of the ancient cities of the world, there are not only architectural and sculptured fragments of much historical importance still remaining to be discovered, but also jewels and other treasures which have not seen the light for decades of centuries. Nineveh, Babylon, Jerusalem, the more ancient parts of Rome, Pompeii, Herculaneum, Egypt, Cyprus, the site of the famous Troy, and those of the once important cities of Asia Minor—all may perchance have something to shew which the present age would be prepared to welcome and appreciate. Concerning Jerusalem, a conjecture has been brought forward of a remarkable kind. After the rebuilding of the second Temple, there were five occasions on which precious metals, treasures, and artistic ornaments might have been concealed by the priests or servants of the sacred edifice—namely, during the abstraction and sale of the temple

furniture by the apostate high-priest Menelaus; at the plunder and defilement of the Temple by Antiochus Epiphanes; during the plunder by Crassus; during that by Sabinus; and at the total destruction by the Romans. On one or more of these occasions, supposing the Jewish priests and servants should have placed valuables in the Temple, the place of concealment may not have been made known to others, and the secret may have been carried with the priests to the grave. Various facts have been adduced in support of this surmise, sufficient to whet the curiosity of men who would value such treasures, not for their intrinsic worth as precious metals or precious stones, but for their historical and ecclesiastical connection with momentous events nearly two thousand years ago.

Dr Schliemann, whose name we have just mentioned, when making researches among mounds and heaps of rubbish at or near the supposed site of Troy in Asia Minor, has lighted upon the foundations of cities which he supposes to have been more ancient even than the Iliad.

But the discoveries more immediately connected with our present subject are those which Dr Schliemann has since made in Greece. With the permission of the king he made excavations near Mycenæ, on the site of what is believed to be one of the most ancient cities in that classic land—far more ancient than the renowned Athens. In treasures and tombs, which had not seen the light for an untold number of centuries, he has discovered beautifully painted vases, whole or in fragments; terra-cotta statuettes and busts of Juno, horses' heads, lions, rams, elephants; knives and keys of iron and bronze; fragments of lyres, flutes, and crystal vases. But most striking of all is the large quantity of gold vessels and ornaments, undoubtedly of precious metal, and in many instances artistically wrought. Sceptres, bracelets, girdles, necklaces, rings, vases, caps, &c. in plenty. One of the Doctor's greatest triumphs was the unearthing of two vases of solid gold, fourteen centimètres (about six inches) high, richly ornamented. Many of these relics, as well as many inscriptions and bas-reliefs on extremely ancient blocks of masonry, have excited the curiosity of classical archaeologists in a high degree. Their thoughts go back to the epics and dramas which treat of Agamemnon king of Mycenæ; of the expedition to Troy; of Clytemnestra, Electra, Ægisthus, Orestes; of the stories of some of the Greek plays by Euripides, Sophocles, and Æschylus. They think of these personages and these events; and they lean strongly to the belief that the disinterred ancient city near Mycenæ, and some of the treasures brought to light by Dr Schliemann, may be veritable tokens of the days of Agamemnon. Some of the articles found were in triangular cells, which he thinks may have been treasuries or depositories for treasure and valuables. But his principal 'finds' of wrought gold were in chambers which were probably the tombs of Agamemnon, Cassandra, and Eurymedon. The vases, the cups, the diadems, the signet rings, were mostly found in these tombs (if tombs they were); as likewise were the bones of a man and a woman covered with ornaments of pure gold. In short, the discoveries have been of a most unusual, interesting, and valuable kind, well calculated to attract the attention of the learned in Europe, whether

learned in classical history or in artistic archæology.

Of discovering or recovering of treasures lying beneath the waves of the ocean, we do not intend to treat here. The reader will find some curious notices on the subject in the article already referred to; also in 'Submarine Treasure Ventures' (May 1, 1869); and in 'The Story of La Latine' (July 8, 1876).

RUSTY IRON.

If no difficulty, as yet unforeseen, bars the way, Mr Barff's plan for rendering iron impenetrable by rust promises to be of the highest practical importance. Iron is by far the most useful of metals, but it has an unfortunate propensity when exposed to water or moist air for attracting oxygen, and this oxygen eats into its substance, and forms the familiar compound known as rust. The consequence is that iron when exposed to the air, especially in so damp a climate as ours, has to be coated with paint, varnish, or tin. But even this coating does not afford entire protection; the slightest flaw in the armour lets in the enemy oxygen, who often does his work all the more surely because concealed from view. A vessel made of iron and coated with some other substance, may look sound to the eye, and yet be a mere mass of crumbling rust. Mr Barff's remedy for this state of things seems to be after the doctrine of the homœopaths, that like is cured by like. If a small degree of moisture affects iron with two distinct species of oxide or rust, what will exposure to a very excessive degree of moisture do? Well, it appears that if iron is placed in a hot chamber and exposed to the action of superheated steam, a new kind of oxide, called the magnetic or black oxide, forms on its surface. Not only does this benevolent species of black rust refuse to penetrate any further into the metal, but it forms an impervious coating against all other influences; and articles thus prepared have been exposed out of doors for weeks this winter without a particle of rust appearing on them. If careful experiments shew that iron is lessened neither in strength nor in durability by this process, its use will be greatly increased, as for several purposes it will take the place of other and more costly metals.—*The Graphic*.

ON A PET DOVE KILLED BY A DOG.

A GAEILIC ELEGY.

THIS following touching verses (as nearly as possible a literal translation from the Gaelic) appeared in the *Scotsman* of May 17, and were accompanied by a note, which we have abridged, from the translator Mr Alexander Stewart of Nether Lochaber. He says: 'I beg to send you a translation of a Gaelic Elegy by Alastair MacDonald the celebrated Ardnamurchan bard, on a pet dove of his that was killed by a terrier dog. It is, in my judgment, a composition of singular tenderness, pathos, and beauty. Its quaint conceits and abrupt transitions, which the reader cannot fail to notice, though they may seem odd and out of place at first sight, form, in my estimation, no small part of its merit. My translation is about as literal as I could well make it, and I have endeavoured to imitate, with what success let others judge, the manner and measure, the rhyme and rhythm of the original. The pet dove was a female, and at the time of her death had under her care, as the poet fails not to notice with an exquisite touch of tenderness in the fourth line, the dove's usual brood of downy twins.

The reference in the poem to the bird's habitat in a wild state shews that it was of the species known as the blue or rook pigeon, thousands of which inhabit the vast caves and precipitous crags of Ardnamurchan and Moidart.'

Mournful my tale to tell,
Though others heed not my sigh;
My gentle, my beautiful pet dove dead—
Must the callow twins too die?
Alas, for the death of the gentlest dove
That ever in woodland coo'd,
Killed by a dog whose proper foe
Were the other that fights, and dies so slow
In his calm solitude.

Of all the birds that cleave the air,
Buoyant on rapid wing,
I mourn thee most, my pet dove fair,
Dear, darling thing!
Noah loved thee, dove, full well,
When a guilty world was drowned;
With thy message of peace thou canst tell
Of solid ground;
He knew thy truth as the waters fell
Slowly around.

The raven and dove good Noah sent
Far over the heaving flood;
The raven wist not the way he went,
Nor back returned, for his strength was spent
In the watery solitude;
But cleaving the air with rapid wing,
The dove returned, and back did bring
His tale of the flood subdued.

At first she found no spot whereon
To rest her from weary flight;
And onward she flew, and on, and on,
Till now at length she gazed upon
The mountain tops in sight;
And the dove returned with her letter—a leaf
(Of mickle meaning, I trow, though brief),
Which Noah read with delight.

Not easy to rob thy nest, thou dove,
By cunning or strength of men;
On a shelf of the beetling crag above
Was thy castle of strength, thy home of love,
Who dare come near thee then?
Harmless and gentle ever wert thou,
Dear, darling dove!
In the ear of thy mate with a coo and a bow
Still whispering love!

Not in silver or gold didst thou delight,
Nor of luxuries ever didst dream;
Pulse and corn was thy sober bit—
Thy drink was the purling stream!
Never, dear dove, didst need to buy
Linen or silk attire;
Nor braided cloth, nor raiment fine
Didst thou require.
Thy coat, dressed neat with thy own sweet bill,
Was of feathers bright green and blue,
And closely fitting, impervious still
To rain or dew!

No creed or paternoster thou
Didst sing or say;
And yet thy soul is in bliss, I trow,
Be't where it may!
That now withouten coffin or shroud
In thy little grave thou dost lie,
Makes me not sad; but oh, I am woe
At the sad death thou didst die.

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A 'VILLAGE HOME'

INDUSTRIAL schools, in which poor children, the waifs of the streets, are fed, lodged, and taught some useful employment, have been in existence for more than thirty years, and are on all hands acknowledged to have been successful as a means of preventing—or lessening the amount of—juvenile crime and vagrancy. The weak point in the organisation of these schools is that they rely for support on the voluntary contributions of benevolent individuals, instead of forming part of the poor-law system, and being thereby maintained by the whole taxable community. Some will think there is a more serious drawback in their constitution. By whatever name these schools are known, they are in effect asylums for the grouping of children to the number of several hundreds in a large establishment; and so far are a repetition of the old species of hospitals, which are now generally condemned. On a late occasion we brought under the notice of our readers a method of boarding-out pauper children among the families of rural labourers and small tradesmen in country towns, which has proved eminently successful wherever it has been tried in Scotland. As this method of boarding-out is under the administration of parochial boards relying on rates, it has, with other merits, that of not specially taxing the benevolence of particular individuals.

What we peculiarly admired in the boarding-out system was its conservation of the family-home as a means of juvenile nurture and intellectual and moral culture. We now propose to give some account of a family-home system which has been established in England. It differs materially from that prevalent in Scotland, and further labours under the objection of being a voluntary charity similar to that of the Industrial schools. Though not quite to our mind, it is much better than nothing, and we bespeak for it the kindly attention of the public.

This English 'Village Home' system originated in the efforts of Dr Bernardo, who began with a

'Home' for Arab and gutter boys in London. No sooner was this Home in operation than he set about founding a similar establishment for girls, in which good work he was ably assisted by his wife. 'The Village Home' at Ilford in Essex, for orphan, neglected, and destitute girls is the result.

Little girls up to the age of eleven or twelve are rescued weekly from misery and danger and placed under the care of a Mother. Even babies of only twelve and fifteen months are admitted, in cases where the detective, employed by Dr Bernardo to find out wretched and abandoned children, learns that the child will be brought up by a 'tramp' to a life of infamy. Before a girl thus rescued is permitted to join the family of which she is to become a member, she is carefully tended for several weeks in a Home in London, in order that her freedom from disease and her personal cleanliness may be secure; after which she is sent down to Ilford, and becomes at once a member of a *family*, with a dozen other girls of varying ages for playmates and sisters. The Mother gives her a kiss, and tells her to be a good girl, and they will all love her dearly; and in a few days the forlorn little one is transformed into something human and child-like. In order to become acquainted with the internal organisation of this 'Home' training of large numbers of destitute children gathered together from all parts of London, we recently visited Dr Bernardo's 'Village Home' at Ilford, the third and most recently founded establishment of the kind. Thither we repair, and find that the pretty red cottages which compose the Village form an oblong square, which surrounds a large open space of ground, intended hereafter to inclose a piece of grass of sufficient size for the grazing of a few sheep. A picturesque gateway admits the visitor to the governor's house, which is built in the same style as the cottages. We were met at the entrance by the governor.

'The children are all in school now,' said he; 'what do you say to going there first, and then you will see them all together?'

During a walk of some five or six minutes, past a dozen cottages and through two or three turnstile gates, we met on our road half-a-dozen happy-faced little children minding babies younger than themselves. The school-rooms occupy a long detached building. We entered one, a large cheerful room furnished with desks and forms, and hung with maps, pictures of animals, and illustrated texts of Scripture and homely proverbs.

The girls regarded us with bright cheerful curiosity. There was no stolid indifference or sullen discontent expressed in any of their faces. They stood up as the governor took off his hat, and each one dropped us a quick little courtesy and smiled pleasantly as we passed by her desk. The ages of the children in this room varied from perhaps ten to fourteen or fifteen; and we observed that their hair was not cropped, that it was braided close to the head, according to the fancy of the owner, where it was long; and that those who had it short wore either a round comb or piece of dark ribbon to keep it from falling over their eyes.

On our remarking to the governor that this in itself was a great improvement on the usual habit of keeping the hair cropped, he replied: 'We do all we can to develop nice womanly habits in the older girls, so we make it a rule *never* to cut their hair, so long as they keep it clean and tidy; and we find the plan succeeds very well, each girl knowing the penalty she will have to pay for slovenliness in this respect; and as you see for yourself, they take care to keep their locks.' The girls are not dressed in uniform, which we consider to be advantageous.

A pleasant-faced schoolmistress presided over this room. The hours perhaps are a little longer than is absolutely necessary; but still, although morning lessons were just over, we searched in vain for one over-tired listless face. All the children looked happy and bright and clean, and most of them were so healthy in appearance that it was a real pleasure to watch them eagerly putting away their slates preparatory to scampering back to their various homes.

The school-room education is sound and practical, and suited to the position the girls will occupy on leaving the Village.

An animated scene met our view as we turned into the square around which stand the various Homes. About a hundred girls, from fourteen years old down to babies only just able to toddle, were laughing and chatting merrily as they hurried along the broad pathway, and gathered in clusters in front of each cottage, glancing shyly at the visitors walking behind ere they disappeared indoors like bees returning to their hives.

We entered the first Home; and as they are all alike in form and arrangement, a description of one will suffice for all. They are of red brick, detached, and of Gothic style, containing day-room, kitchen, scullery, and pantry on the ground-floor, besides a tiny private sitting-room for the Mother. The sleeping apartments are up-stairs, five in

number; four for the little family, and one small one for the Mother.

From half-past twelve to one is dinner-hour, so we arrived just in time to see the meal served. Each cottage is presided over by a woman carefully selected for the post she has to fill, capable of both firmness and gentleness, of an affectionate disposition, and accustomed to manage children. She is called Mother by the little ones under her care; her will is law; all in her cottage obey it; or if not, are treated as naughty children would be in homes of their own. The various arrangements of the household are made clear to each inmate, and the conscientious carrying out of them is inculcated on each member of the family for the comfort and well-being of all. The cottages are large enough to hold twenty girls, five in each bedroom; but when we were there, none of the cottages contained more than fifteen or sixteen.

The rooms in which the girls sleep are plain and homelike. Small iron bedsteads painted green, and covered with a counterpane bearing the name of the Village, woven in the centre, occupy the corners; a washing-stand with basin and jug and soap-dish of simple ware, is placed on one side, to enable the girls to learn to use and lift such breakable articles without fear or awkwardness; combs and brushes are kept in a drawer, and a square looking-glass hangs on the wall, that there may not be any excuse for untidy appearance.

Nothing is done in the Home by forced routine. The older girls take it in turn to help to cook the dinner, to lay the cloth, to keep the house in order, and to imitate Mother in everything she does. Each small domestic duty is performed over and over again, till each child learns to be quite an adept at cooking potatoes, or cleaning out a room, or washing and dressing a younger one; and takes a pride in her work, so as to be able to do it as *well as Mother*. The child is daily and hourly accustomed to perform small services for the household, to keep down her temper, to give sympathy and willing aid to those who have not been so long in the Home as herself, and to do all she can to help Mother; hence, when she enters service, she has already learnt in her Home to do thoroughly all the commonplace duties which are likely to fall to her lot as a servant. In these Homes every girl has a motive for which to work; she is taught to love truth, to be gentle and modest, and to give and accept the affection to which all have an equal right from Mother down to the youngest in the house. Family interest is encouraged in every cottage; the girls are taught to regard each other as adopted sisters; individuality of character is carefully studied by the head of the household, and as far as lies in her power, is trained into usefulness for the benefit of the whole community.

Every day, in each household one or two stay from school for an hour or so, in order to learn the art of cooking the simple dinner partaken by their sisters when they come home. The table is carefully laid; every article in the kitchen is

scrupulously cleaned; the rice, if it be rice-day, duly weighed, washed, boiled, and constantly watched by the eager pair of eyes whose duty it is to see that it does not burn; and then, when all, with clean hands and faces, are seated round the table, the little cook of the day has to carry the plates full of rice to Mother, to add the treacle or sugar allowed, according to the wish of each child.

The furniture of the cottage throughout is solid and plain, and of a kind that can be kept clean by scrubbing. The children amuse themselves in the room in which they dine; at one end of which are shelves divided into pigeon-holes, in which each girl may keep her work and small treasures. These pigeon-holes are left unclosed, to teach the children to resist the temptation of touching a sister's things without leave. In this room they play, work, mend their clothes, darn their stockings, and talk to Mother, who sits with them for the greater part of the evening. She has her own private parlour at the side, from whence she can command a view of the kitchen and scullery and see that all goes on well there; and at the same time she can hear, without being seen, the conversation that takes place between her children and any relative who is permitted to visit them; an arrangement which often avoids harm from injudicious influence.

One of the special duties of the Mother is to inculcate habits of domestic comfort in a home on a small scale, and so to cultivate the powers of contrivance of each girl as to obtain the greatest possible amount of household pleasure for all.

Each girl's clothes are kept on a shelf in a press; the elder ones superintend mending operations, and the tidiness of the younger ones. There is *no number* marked on their things, not even on the shoes and boots, which are kept beautifully clean and ready for use in a recess at the foot of the press.

Everything about the cottage bears the stamp of ordinary home-life; nothing is institutionalised. Every natural social feeling is fostered and developed in this Home life, so that when the time arrives for a girl to go into service, she carries with her into her new home not only a practical knowledge of the duties expected of her, which fits her to hold her own among her fellow-servants, but the firm conviction that she has only to do well to get on; added to which she wears in her heart the very best preservative against doing badly, the talisman of the love and affection of the family amongst whom she has been reared.

Each cottage is called at Ilford after the name of a flower—Hawthorn, Rose, Forget-me-not, Sweetbrier, and so on; and as far as possible the hats and cloaks for Sunday and holiday-wear are identified, each with its Home; so that the groups belonging to the various Cottages may be distinguished in church by the differing colour of the hat or style of the cape.

A large laundry is attached to the cottages. Here the girls learn laundry-work, from the clean washing and ironing of a coarse towel to the careful goffering and ironing of a lady's ruffle or a gentleman's shirt. They all take their turn in every department of the work, not doing a set piece and then leaving it because the task is done, but taking an interest in the part assigned to them, and each one vying with the other in quickness

and thoroughness. The pride with which they exhibited their ironing shewed plainly that it was no forced task, but a labour of genuine pleasure. Bright pleasant-spoken women superintend this part of the Home, inculcating that 'everything that is worth doing at all is worth doing well,' and seeing that nothing is left till it is finished. Although it was the dinner-hour, several of the girls were still busy at the tables.

'It won't take you five minutes to finish that shirt, Lucy,' we heard one of the women say to a rosy-cheeked girl; 'and it would be a pity to leave it; the starch will get so dry.' The girl answered with a smile, and went on ironing cheerfully, quite as anxious that her work should look nice as the Mother was for her. Such training as this cannot fail in its desired effect; and girls taught thus early to take an interest in the labour of their hands, cannot fail to do honour to the Home they have been reared in, and the kind Mother, whose affections they hope to retain to the end of life.

A girl who had been thus trained for two or three years waited on us at lunch at the governor's table. She is about thirteen, and not very big for her age; but she managed not only to supply us with all we required in a handy way, but to carry up to the nursery the babies' dinner. Her movements were quiet, her manners dignified and self-contained, and she kept an eager watch on us, to observe if we had all we needed. She was evidently intent on doing her best, and was ambitious enough to even try and divine if anything was missing. We were informed when this girl left the room that she had been in the Home some time, that she had a fearful temper, but that great hopes were entertained of her turning out at sixteen a good useful servant.

We were all the more impressed with this specimen of the results of the Home training system, as we had had only a short while since had in our house a pattern girl from one of the workhouse schools. She was sent to us as *quite fit* to enter service. She was fourteen, a year older than the Ilford little maid, and had been brought up from a baby in the Union. She could read and write perhaps better than most young ladies of her age; she knew a smattering of geography, a jumble of history and poetry, but such an amount of bad language and viciousness that we were horrified at her knowledge. Not one simple piece of household work did she know anything about or cared to learn to do. She was stolid and indifferent if shewn how to clean, insolent if reproved for a fault, and not to be trusted either in what she said or in what she did. She had no standard of morals; stared absently, as if one were addressing her in an unknown tongue, if spoken to about trying to do her best to please her mistress; and when waiting at table or performing personal service, merely acted like a machine; and yet she was naturally a much cleverer girl than the Ilford child; and if she had been subjected to the refining and humanising effects of Home surroundings, might have developed into a thoroughly useful maid.

Dr Bernardo entreasts all who can to join him in carrying on the work he has begun of rescuing vagrant girls from destruction. Like many institutions dependent on precarious contributions, it is sadly in need of funds, and will gratefully receive presents either in linen, simple stuffs for girls' frocks, or in money; and we can answer for it, that

all those who are interested in the Home and would like to see it, will be kindly greeted by the governor if they will take the trouble to visit the pretty little Village at Ilford.

THE LAST OF THE HADDONS.

CHAPTER XXXII.—DEATH, BUT NOT BROKEN.

AN hour later I slipped noiselessly in at the cottage door, which stood hospitably open for me, passed the parlour, where I could hear Mrs Tipper and Lilian talking together, and stole up to my own room. Gusts of wind and rain were beating in at the open window. I afterwards heard that a terrible storm had swept over the country that night, laying waste the crops and spoiling the harvest in all directions; I only knew of the storm which had devastated my hopes. I imagined that I had myself sufficiently under control to venture to return—but alas! Another bitter struggle, another wrestle with my weaker self, amidst wild prayers for help—for death.

Then I was on my feet again, telling myself, in a pitiable would-be jaunty strain: 'No; you will never slip out of your misery in *that* way, Mary Haddon, and it is folly to hope it. You are not the kind of person you know. You could not die of a broken heart if you were to try. Your vocation may be to suffer, but you will not die under it—certainly not without a long preliminary struggle to live. You are not made of the material which fades gracefully away under pressure; and yesterday you would have affirmed that you did not wish to be made of it. You have always scouted the idea of being at the mercy of circumstances; you have been a little hard upon those who succumbed under trial—in your inmost heart, you know that you have not had much patience with weakness; and now has come the opportunity for proving your superiority to ordinary mortals.'

Then my mood changed. I dragged myself towards the dressing-glass, thrust the damp hair from my brow, and stared at my face with miserable mocking eyes, as I reviled it for its want of loveliness, and taunted myself with not being able to keep a good man's love. Then I fell to weeping and pleading again; and thank God, it was this time for help to *live*. Alas, would the victory *ever* come? Do others find as much difficulty as I did in overcoming? Have others as much cause to feel humble in the hour of victory as I had? I know that it is all very pitiful to look back upon; though the consciousness of my weakness under trial did me great service afterwards. Weak and faint, but thank God, not worsted, I at length rose from my knees, bathed my face and hands, and after a while had my feelings sufficiently under control to think over the best way of doing what it was my resolute purpose to do. My power of self-command was very soon put to the test. I was conscious of another sound besides that of the sighing and sobbing of the wind, which like a tired child who has spent its passion, was sinking to rest again. Some one was tapping rather loudly at the door.

Alas! how weak I still was. How could I meet Lilian's eyes? Not yet, I dared not. But whilst I stood with my hands pressed against my throbbing heart gazing at the door, I recognised Becky's

voice. What a reprieve! I hastened to admit her, and then locked the door again.

'If you please, Miss, Mrs Tipper was afraid you was out in all this storm, and'—She stopped; looked at me for a moment with dilating eyes, and then her tears began to flow. 'O Miss Haddon, dear, are you ill? What's the matter?'

'You must not cry, and you must not speak so loud, Becky.'

She saw that I waited until she had ceased, and hastily rubbed the tears out of her eyes.

Then in a low quiet voice, I said: 'A great trial has to be gone through, Becky. It *must* be borne, and I think you can help me to bear it.'

'I knowed it was coming—I knowed it!' said Becky, under her breath.

'What did you know was coming?'

She appeared for a moment to be searching in her mind for the best way of telling me, and at the same time expressing her sympathy; then with lowered eyes replied: 'I loved Tom—I always shall love him—and he can't love me.'

She knew then! Probably every one but myself had seen it!

'In that case, you know that such things are not to be talked about, Becky.'

'Yes, Miss; only'—

'I know that it was your regard for me which made you mention it. But we need all our strength just now—you as well as I—and we must not think or speak of anything that will weaken it. I want your help, and to help me you must be cool and quiet and strong. Will you try to be that?'

'Yes; I will—I will indeed, dear Miss Haddon,' eagerly adding: 'What can I do?'

I stood pressing my two hands upon my temples in anxious thought a few moments, then asked: 'Do I look unlike my usual self, Becky—ill? Tell me exactly how I look to you?' thinking of the effect which the first sight of me had had upon her!

'Yes; you look terrible white, and wild, and trembling; and there's great black rings round your eyes,' gravely and straightforwardly replied Becky.

'As though I had been frightened by the storm. There has been a storm; hasn't there?'

'Yes; there's been a terrible storm, Miss; but'—

'Go on, Becky.'

'You're not the sort to look like that about a storm.'

'I see.'

If that was Becky's opinion, the storm would not do for Lilian and Mrs Tipper, and the alteration in my appearance must be accounted for in some other way. I was seeking about in my mind for a way out of the difficulty, when Becky unconsciously helped me with the exclamation:

'O Miss Haddon, dear, what have you done to your hand?'

Looking down, I saw that there was a slight wound in it—made I suppose when I fell, by a nail or sharp stone—and that it had been bleeding somewhat freely.

'Nothing to hurt, Becky,' I murmured; 'but it will serve my purpose. Give me a handkerchief—quick! and now another!'

She understood me; and when Lilian presently came running up, she found appearances suli-

ciently sanguinary—quite enough so, to account for my looking strange and unlike my usual self.

'Dear Mary, what is it? Oh, how have you hurt yourself?'

It was really a very superficial wound; but of course I did not explain that; making a little demonstration about the wrapping up with Becky's assistance.

'It has made you look quite ill, dear!' went on Lillian, kneeling down by my side. 'Let me tie that, Becky.'

But Becky would not yield an inch until I had given her a little look of reminder, and then did so very reluctantly.

'And your clothes are quite wet, darling!' ejaculated Lillian. 'You must have been out in all that storm. Fearful, wasn't it? Could not you find any shelter?'

'No; it had to be borne as best it might,' I grimly replied; though I called myself to order at once; a startled look in Lillian's eyes shewing me that I could not talk about storms with impunity as yet.

Then there was dear little Mrs Tipper hurrying in with a concerned face to inquire what had happened, and recommending all sorts of remedies for my hand. Did I not think it better to send Becky into the village for Mr Stone the surgeon? Was I quite sure it did not require being strapped up? Had I looked to see if there was anything in the wound? &c.

But I had my hand well muffled up; and assured them, with more truth than they suspected, that it really was not a very serious cut. 'Only I think I will say good-night, and take off these wet things at once, if you will excuse my not coming down again,' I added, with a feverish longing to be alone.

I had nevertheless to submit to mulled wine and a great deal of comforting and petting. And Lillian entreated to be allowed to remain with me during the night. 'Dear Mary, do let me stay; I feel sure that you are not so well as you think you are.'

But I sent her off with a jest; and my first difficulty was overcome. Two hours later, when she had made sure that the others were at rest, Becky stole into my room.

'I will lie on the floor, and I won't speak a word; but don't send me away, please don't send me away,' she whispered.

I was obliged to make the faithful girl share my bed, for I could not prevail upon her to leave me. Probably her presence was some little help to me in the way of preventing any indulgence of sentiment, had I been inclined to yield to it again. When morning came, cool and fresh and sunny after the storm, I was myself again; not my looks—the effects of the storm which had passed over me were not to be so easily effaced—but I was nerved in spirit for what was to come. In the early morning—so early that Becky had barely time to slip away—came Lillian in her white wrapper; and then I noticed how fragile she had become. My darling, had I been even for a moment so unjust as to doubt you, I could have doubted you no longer! She was full of loving sympathy about my hand.

'Dear Mary, I could not sleep for thinking of you. Even now you do not look quite yourself.'

'Nevertheless, I am myself.'

She nestled closer to me, looking anxiously and doubtfully up into my face. How thankful I should have been just at that moment if love were as blind as it is sometimes depleted as being!

'No; not quite your old self. Say—do say that you love me, Mary.'

'Is it necessary to say it, Lillian?'

'Yes; feverishly.'

'Then I love you, child.'

'And—and say that you believe my love for you is true—say it!'

'I know that your love for me is true, my sister.'

Once more she clung to me trembling in her deep emotion; but silently this time, and believing that she was asking for strength to go on, I waited until she was able to do so. Although I knew now that she loved Philip—it was as plain to me as that she loved her—I thought it better to let her herself lead up to what she wanted to say. It would comfort her by-and-by to remember she had been able to say it. Presently she looked up into my face, a holy light in the sweet eyes as they steadily met mine.

'Mary, you have not told me when your wedding is to take place. Recollect, you must give me at least a week's notice for my dress. I do not choose you to have a shabby bride's-maid. No, indeed; I mean every one to see that—she loves you. Is the time fixed?'

'Philip wished me to decide last night, and—something was said about next week, dearie.'

'I am glad it is settled, Mary,' with grave earnestness, her eyes still fixed upon mine.

'But—I am afraid it will shock you very much to hear it—somehow, I do not care to think about it.'

She grew whiter, clinging closer to me as she echoed: 'Not care to think about it!—your marriage?'

I steadied myself. One weak word—a look—and all would be in vain.

'It does seem a little strange even to myself. But to confess the truth' (I could hardly keep back a bitter smile at the thought of the truth helping me so), 'I had scarcely promised Philip an hour, before I began to think I would put it off.'

'Why?' she murmured—'why?'

'It is so difficult to explain the workings of one's own mind. I am not sure whether marriage is my vocation. I begin almost to fancy that I must have been intended for an old maid. Would it shock you very much if I were to be one after all?'

'You!—an old maid? How could that be? You are jesting of course.'

'I am not so sure.—But run away and dress, child. If we are late for breakfast, auntie will fancy that all sorts of dreadful things have happened to us.'

She obeyed me, but was, I saw, puzzled, and even a little frightened at my jesting. The only effect of my first attempt had been to make her startled and afraid. Her knowledge of me had not taught her to expect that I should not know my own mind upon so momentous a question as my marriage. My task would be difficult indeed. At breakfast she told Mrs Tipper that my marriage was to take place the following week.

'Next week, dear!' said the thoughtful little

all those who are interested in the Home and would like to see it, will be kindly greeted by the governor if they will take the trouble to visit the pretty little Village at Ilford.

THE LAST OF THE HADDONS.

CHAPTER XXXII.—BENT, BUT NOT BROKEN.

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'You're not the sort to look like that about a storm.'

'I see.'

If that was Becky's opinion, the storm would not do for Lilian and Mrs Tipper, and the alteration in my appearance must be accounted for in some other way. I was seeking about in my mind for a way out of the difficulty, when Becky unconsciously helped me with the exclamation:

'O Miss Haddon, dear, what have you done to your hand?'

Looking down, I saw that there was a slight wound in it—made I suppose when I fell, by a nail or sharp stone—and that it had been bleeding somewhat freely.

'Nothing to hurt, Becky,' I murmured; 'but it will serve my purpose. Give me a handkerchief—quick! and now another!'

She understood me; and when Lilian presently came running up, she found appearances suffi-

ciently sanguinary—quite enough so, to account for my looking strange and unlike my usual self.

'Dear Mary, what is it? Oh, how have you hurt yourself?'

It was really a very superficial wound; but of course I did not explain that; making a little demonstration about the wrapping up with Becky's assistance.

'It has made you look quite ill, dear!' went on Lilian, kneeling down by my side. 'Let me tie that, Becky.'

But Becky would not yield an inch until I had given her a little look of reminder, and then did so very reluctantly.

'And your clothes are quite wet, darling!' ejaculated Lilian. 'You must have been out in all that storm. Fearful, wasn't it? Could not you find any shelter?'

'No; it had to be borne as best it might,' I grimly replied; though I called myself to order at once; a startled look in Lilian's eyes shewing me that I could not talk about storms with impunity as yet.

Then there was dear little Mrs Tipper hurrying in with a concerned face to inquire what had happened, and recommending all sorts of remedies for my hand. Did I not think it better to send Becky into the village for Mr Stone the surgeon? Was I *quite* sure it did not require being strapped up? Had I looked to see if there was anything in the wound? &c.

But I had my hand well muffled up; and assured them, with more truth than they suspected, that it really was not a very serious cut. 'Only I think I will say good-night, and take off these wet things at once, if you will excuse my not coming down again,' I added, with a feverish longing to be alone.

I had nevertheless to submit to mulled wine and a great deal of comforting and petting. And Lilian entreated to be allowed to remain with me during the night. 'Dear Mary, do let me stay; I feel sure that you are not so well as you think you are.'

But I sent her off with a jest; and my first difficulty was overcome. Two hours later, when she had made sure that the others were at rest, Becky stole into my room.

'I will lie on the floor, and I won't speak a word; but don't send me away, please don't send me away,' she whispered.

I was obliged to make the faithful girl share my bed, for I could not prevail upon her to leave me. Probably her presence was some little help to me in the way of preventing any indulgence of sentiment, had I been inclined to yield to it again. When morning came, cool and fresh and sunny after the storm, I was myself again; not my looks—the effects of the storm which had passed over me were not to be so easily effaced—but I was nerved in spirit for what was to come. In the early morning—so early that Becky had barely time to slip away—came Lilian in her white wrapper; and then I noticed how fragile she had become. My darling, had I been even for a moment so unjust as to doubt you, I could have doubted you no longer! She was full of loving sympathy about my hand.

'Dear Mary, I could not sleep for thinking of you. Even now you do not look quite yourself.'

'Nevertheless, I am myself.'

She nestled closer to me, looking anxiously and doubtfully up into my face. How thankful I should have been just at that moment if love were as blind as it is sometimes depicted as being!

'No; not quite your old self. Say—do say that you love me, Mary.'

'Is it necessary to say it, Lilian?'

'Yes; feverishly.'

'Then I love you, child.'

'And—and say that you believe my love for you is true—say it!'

'I know that your love for me is true, my sister.'

Once more she clung to me trembling in her deep emotion; but silently this time, and believing that she was asking for strength to go on, I waited until she was able to do so. Although I knew now that she loved Philip—it was as plain to me as that he loved her—I thought it better to let her herself lead up to what she wanted to say. It would comfort her by-and-by to remember she had been able to say it. Presently she looked up into my face, a holy light in the sweet eyes as they steadily met mine.

'Mary, you have not told me when your wedding is to take place. Recollect, you must give me at least a week's notice for my dress. I do not choose you to have a shabby bride-maid. No, indeed; I mean every one to see that—she loves you. Is the time fixed?'

'Philip wished me to decide last night, and—something was said about next week, dearie.'

'I am glad it is settled, Mary,' with grave earnestness, her eyes still fixed upon mine.

'But—I am afraid it will shock you very much to hear it—some way, I do not care to think about it.'

She grew whiter, clinging closer to me as she echoed: 'Not care to think about it!—your marriage?'

I steadied myself. One weak word—a look—and all would be in vain.

'It does seem a little strange even to myself. But to confess the truth' (I could hardly keep back a bitter smile at the thought of the truth helping me so), 'I had scarcely promised Philip an hour, before I began to think I would put it off.'

'Why?' she murmured—'why?'

'It is so difficult to explain the workings of one's own mind. I am not sure whether marriage is my vocation. I begin almost to fancy that I must have been intended for an old maid. Would it shock you very much if I were to be one after all?'

'You!—an old maid? How could that be? You are jesting of course.'

'I am not so sure.—But run away and dress, child. If we are late for breakfast, auntie will fancy that all sorts of dreadful things have happened to us.'

She obeyed me, but was, I saw, puzzled, and even a little frightened at my jesting. The only effect of my first attempt had been to make her startled and afraid. Her knowledge of me had not taught her to expect that I should not know my own mind upon so momentous a question as my marriage. My task would be difficult indeed. At breakfast she told Mrs Tipper that my marriage was to take place the following week.

'Next week, dear?' said the thoughtful little

lady, looking from one to the other of us in a nervous startled way, adding rather confusedly: 'I did not expect—that is, I thought there would be more time for—preparations, you know.'

'I believe it is all Mary's fault; and that she gave us so short a notice on purpose to escape a fuss, as she calls it, auntie. But she will not escape any the more for that, will she? A great deal may be done in a week.'

'Of course we shall do the very best we can do in the time, dear,' returned the little lady, looking the least self-possessed of the three of us, as she went on to ask me in a trembling voice which day in the week was fixed upon.

I said something about its not being decided yet, and tried to force the conversation into other channels. But Lillian would talk about nothing but the wedding and the preparations to be made for it. Her forced gaiety might have deceived me, had I not known.

'You will not require to buy much, auntie; the gray moire and white lace shawl, which you only wore once at the Warmans' *fête*, will do beautifully with a new bonnet. But I of course must be new from head to foot—white and blue—I suppose. The best plan will be to write to Miss Jefferies and give her a *carte blanche* to send everything that is right; for we do not mind a little extra expense for such an occasion; do we, auntie?'

'No, dear, no; of course not. But you have not asked what Mary has chosen.'

'Oh, that will be white of course.—When is your dress coming down, Mary? I must see that it is becomingly made; you know you are so careless about such matters.'

I made some remark to the effect that wedding dresses and wedding paraphernalia in general did not sufficiently interest me to seem worth the time and trouble they cost.

But Lillian was not to be repressed, returning again and again to the one topic.

'And you must not forget that you promised to let auntie and me take the management of Hill Side during your absence, and see that all your plans are being properly carried out. Nancy is to go there at once, I suppose! Philip says that the oak furniture for the library will not be ready for a couple of months, on account of the firm having so many orders for the pattern you chose. And, recollect, Mary, I am to have the pleasure of choosing *everything* for your own little cosy; I know your taste so well that I am sure I shall please you, and you are not to see it until it is finished.'

All I could do was to try to give them the impression, without saying so much in words, that I was not so much interested in the question as might have been expected. I saw that it would not do to venture far, with Mrs Tipper's eyes turned so watchfully and anxiously upon me.

My hardest trial was the unexpected arrival of Philip soon after breakfast was over. Whether he had come down only to fetch the papers, or whether it was in consequence of what had passed between himself and Robert Wentworth, I know not, but he availed himself of the opportunity to tell Mrs Tipper that I had consented that our marriage should take place the following week.

At his first words I took the precaution of seating myself at the piano with my back towards

them, running the fingers of my one hand over the notes, with a demonstration of trying the aid of a new song which he had added to our collection. Then with my fingers on the keys, I stopped a moment—quite naturally, I flattered myself—to throw him a few words over my shoulder.

'The idea of your taking my words so literally as all that!'

'I not only took your words literally, but mean to make you keep them literally.'

'Oh, nonsense!'

Ah Philip, how surprised you were, as indeed you well might be, at my assumption of flightiness! How more than surprised you were afterwards, when I placed every obstacle I could think of in the way to prevent our being alone together; and how honestly you tried to act the part of a lover in the presence of Mrs Tipper and Lillian, insisting upon my keeping my word, and refusing to accept any excuses for delay, Lillian as honestly taking your side.

Fortunately, my maimed hand, which I kept in a sling and made the most of, sufficed to account for my altered appearance. But for that and my bearing towards Lillian, Philip might have suspected. Then he found me so entirely free from anything like pique or anger towards himself, that he could not imagine the change he observed to be occasioned by any fault of his own. I had indeed nothing to dissemble in the way of anger. In my moments of deepest misery, it was given me to see that there had been no intended disloyalty to me. Philip's love for Lillian and her love for him were simply the natural consequence of two so well fitted for each other being thrown together intimately as they had been. I am writing from a distance of time, and of course in a calmer frame of mind than I was in at the moment of the trial; but I know that my thoughts all tended to exonerate them from the first.

None knew better than did I how completely free Lillian was from anything in the way of trying to attract, even as much as girls may honestly do. Knowing what I did—reading both their hearts—it was very precious to me to see their truth and fealty to the right. I knew that if they once perceived my suffering, nothing would induce them to accept happiness that way. I must keep my nerves steady! As much as I was able to compass that first day was to puzzle them all; but even that was a little step—it was something that they could see the change without discovering the cause. Quite enough to begin with.

TORPEDOES AND INFERNAL MACHINES.

Ox Easter Monday last, when several thousands of persons were holiday-making in a public garden out north-westward of London, a loud bang startled the inmates of houses many miles from the spot in all directions—louder than any discharge of artillery, and comparable to a blowing-up on a tremendous scale. It proved on investigation to be due to the explosion of a cylinder no more than twenty-five inches in length by two inches in diameter, filled with one or other of those destructive compositions which chemistry has lately presented to us, and to which have been given the mysterious names of dynamite, lithofracteur, gun-cotton, nitro-glycerine, &c. How such a diabolical sausage got into such a place at such a time, and

what the police authorities have had to say about it, we need not detail here; but the subject sets people thinking ugly thoughts about Torpedoes and Infernal Machines.

The French have had much to do with (so-called) infernal machines, which, under various forms, have been employed to assassinate successive sovereigns, but happily failed in the wicked attempt, though not without inflicting injuries on onlookers. In 1804, when Napoleon thought that he had England pretty nearly in his grasp, a *cata-maran* expedition was fitted out by the English to act against him. This catamaran was an oblong water-proof box lined with lead; it contained fifteen hundred pounds of gunpowder, various inflammable substances, clockwork to produce an explosion at a given moment, and ballast to steady it. Being towed towards an enemy's ship and left for the tide to float it onward, it would cling to the ship by means of grappling-irons buoyed up with cork; and in a given number of minutes the clockwork acting on a trigger would explode the combustibles. Such at least was the theory; but the chances of failure were found to be too numerous and varied in practice. Some years after this, Colonel Colt, the inventor of the celebrated revolver, devoted a great deal of time to this subject of infernal machines, making many combinations which were useful as hints to later contrivers.

In 1809, when Lord Cochrane was engaged against the French in the Bay of Biscay, he employed a destroyer most formidable in character. He filled a number of empty puncheons with about fifty thousand pounds of powder; on the tops of these puncheons were placed three hundred and fifty explosive shells, with fuses, and upwards of two thousand hand grenades among and between them. The whole were bound and jammed together with cables, wedges, and sand, on board a small vessel called the *Devastator*. A fifteen minutes' time-fuse being ignited, the crew (Cochrane himself, a lieutenant, and four seamen) rowed away quickly in a boat. The infernal monster did not produce quite the kind of mischief intended; the explosion was one of the most tremendous ever heard; but the enemy's ships were rather too far away to be materially damaged, while Cochrane lost some of his gallant little crew by over-fatigue and drowning by tumultuous waves.

During the short war between England and the United States in 1812-13, many submarine boats were suggested and partially tried, but with no great result.

The Crimean War (1854-56) brought to the Admiralty a deluge of inventors and projectors, each armed with some new scheme of a 'diabolical' kind. The Earl of Dundonald (the Lord Cochrane of 1809) sounded the government concerning a plan which he had matured long before; but there was hesitation in the matter; and the public learned little more than that the scheme related to a kind of fire-ship. Captain Warner's 'long range' was another crotchety, by which an enemy's vessel was to be destroyed at an immense distance by something being hurled against it; this something, whatever it may have been, did not find favour with the government. Then there was a talk also about Captain Disney's war-projectile, consisting of a metal cylinder having a bursting charge at one end, and at the other a

highly combustible liquid; the liquid, when exposed to the air, set fire to almost everything with which it came in contact. This pleasant kind of plaything was to be propelled against ships, buildings, or masses of troops. Captain Disney had another mode of employing what he frankly called his 'infernal fluid,' which would 'cause blindness for several hours to all troops coming within a quarter of a mile of it.' The real nature of the liquid was his peculiar secret, which, so far as we are aware, the government did not think proper to purchase.

While discoverers and inventors were directing their attention to these intentionally destructive contrivances, the principal governments were cautiously testing some of them as opportunity offered. The Russians studded the Baltic with submerged torpedoes in 1854-55; iron cases containing combustibles, sulphuric acid, and chloride of potash, so placed that a sudden concussion would make the whole explode. Very few British ships were really hit by them; but a good deal of uneasiness was felt by the crews of Admiral Sir Charles Napier's fleet, who would much rather have encountered an open enemy than a concealed submarine foe, the whereabouts of which could not be determined beforehand. In 1859 the Austrians in their brief war with Italy used torpedoes in which gun-cotton was fired off by an electric current. During the American Civil War, 1861 to 1865, nearly forty vessels were destroyed by torpedoes. (We may here mention that this name, first given to these contrivances by the Americans, was derived from one designation of the torpedo or electrical fish.) Three-fourths of the destruction was wrought by the Confederates against Federal vessels, but the remainder blew up or disabled the Confederates' own ships. The torpedoes employed were of various kinds and sizes, some exploding by mechanical concussion, some by chemical action, some by electric discharge. One of them was a complete submarine boat, which could be lowered to several feet below the surface of the water, and there propelled with hand-paddles at the rate of four miles an hour; by men shut up in a water-tight compartment, and provided with half an hour's compressed fresh air. This submarine boat dragged a floating torpedo, allowed it to come under the bottom of an enemy's ship, paddled away to a safe distance, and then fired the torpedo by an electric fuse. Such at least was the theory; but it proved to be a case of the engineer 'hoist by his own petard;' for although the torpedo really did destroy a Federal ship, the submarine boat and its crew were never afterwards seen or heard of.*

Some of the contrivances to which naval engineers are directing their attention are called *outrigger torpedoes*. A small swift steamer has an outrigger or pole projecting twenty or twenty-five feet from one side; a torpedo case is fastened to the outer end of the pole, and a concussion-fuse is fitted to it, or an electric-wire extends along the pole. When the steamer has cautiously and

* Since writing the above, information has come to hand concerning the real fate of this submarine boat. When the civil war was over, divers were sent down they fished up the enemy-destroying and self-destroying torpedo-boat, which was found, with its dead crew in it, underneath a Federal ship, which it had sunk by bursting a hole in the hull.

silently brought the torpedo (which may be either a little above or a little below the surface of the water) under the bottom of an enemy's ship, the composition within it is fired by the fuse or current, and the explosion left to do its destructive work. It is supposed and intended that the distance of twenty or twenty-five feet between the steamer and the torpedo will keep the former free from peril. Some torpedoes are self-explosive on touching the enemy's ship. One variety is a hollow iron cone, kept at a certain depth under water by a mooring chain; the cone contains from one to three hundred pounds of powder; above this is an air-space to give buoyancy, over this a small apparatus of chemicals, and at the top of all a projecting rod. If the bottom or lower part of the hull of a passing ship happens to strike against this rod, a kind of trigger explodes the chemicals and then the powder—with what result the evil fates are left to determine. Another kind, not self-explosive, is ignited from the shore. The torpedo-cone is moored as in the former case, and electric wires extend from it to a battery on shore. When an enemy's ship is seen to be passing just over the torpedo, a shock is sent from shore, and the demon of mischief explodes. A self-exploding torpedo has the disadvantage of destroying one's own ships occasionally, by a mishap; while the others are with difficulty coaxed to explode just at the desired instant.

Six or eight years ago, the public were a good deal mystified about Captain Harvey's torpedo, what it was and what it was intended to accomplish. It was described as an oblong box, to be towed beside a steamer by means of a long rope. It was charged with a powerful explosive composition; it had projecting levers at the top, a tube containing a detonating compound, and a bolt that could be pressed down upon the detonator by the levers. Towed out to its place by a steamer of great speed, it is brought close to the side of a hostile ship, the tow-rope is then slightly slackened, the torpedo sinks a little, and as the rope tightens again, it comes with a violent blow against the ship's bottom, exploding and making (theoretically at any rate) a big hole in the ship's hull: a short process, but by no means a merry one. (The English authorities are said to be manufacturing Harvey's torpedoes at Woolwich Arsenal at the time we write, June 1877.)

Rather more recently, Captain Ericsson's torpedo attracted the attention of the American government. It had one feature of a remarkable character—a hempen cable utilised as a tube or pipe by making the centre hollow. The torpedo, a cylinder of light galvanised iron, was about ten feet long by nineteen inches in diameter, and was charged with nearly four hundred pounds of nitroglycerine. It was towed by a steamer, with a tubular cable or rope half a mile long. When brought into a desired position, the torpedo was propelled swiftly in any direction by compressed air driven through the tubular rope. The torpedo could be wound in so as to be any less distance than half a mile from the steamer. One rather fails, however, to see how the commander of the steamer is to send the explosive matter against an enemy's ship exactly at the right time and in the right direction.

The Whitehead or fish torpedo, one of the kinds now being experimented upon by the Eng-

lish government, appears to be a very elaborate contrivance. It is a sort of submarine rocket, a cigar-shaped iron case five or six yards long by about half a yard in diameter at the thickest part. At one end is a charge of three or four hundred pounds of dynamite or of compressed gun-cotton, with a pistol or trigger-detonator to ignite it; then a pneumatic chamber for compressed air, with an apparatus for maintaining the torpedo at any predetermined depth below the surface of the water; then an air-chamber, tested to a thousand pounds on the square inch, and containing an air-engine with compressed air; and lastly, a double action screw propeller. So much for the torpedo; but how to make it travel along and then explode? It is either driven into the sea out of an apparatus called an ejector, fitted in the bow of a steamer built for the purpose, or it can be launched from a special carriage placed on deck. The arrangements can be so made that the torpedo will travel along at any depth below the water varying from one foot to thirty feet, for a horizontal distance of a thousand yards, and with a speed of seven miles an hour. A torpedo-vessel called the *Lightning* has just been built by Messrs Thornycroft and Donaldson for the Admiralty, to contain two or more of these torpedoes, and to eject them one at a time against an enemy's ships. The idea is, to steam to a distance of a few hundred (less than a thousand) yards from the enemy, and eject a torpedo, with its engine, screw, &c. working, in the right direction; the head of the missile, if it dashes under water against an enemy's ship, will explode, and burst a huge hole in the ship's bottom. Or by another adjustment the explosion can be timed to occur in a definite number of minutes after the ejection. A missile of great cost this will be, whether it hits the enemy or not; seeing that the whole of it will be hurled to fragments if it explodes at all; a cost, per missile, of four or five hundred pounds sterling.

A school of torpedo-warfare has been established at Portsmouth; and there can be little doubt that foreign powers are doing the like. Alas for humanity and civilisation! It is contended, however, that all this *diablerie* will lessen slaughter, by deterring armed ships from coming within torpedo-distance; but a great naval war can alone determine the matter.

As to infernal machines, contrivances planned for some dastardly and nefarious purpose, an incident about four years ago gave us a little insight into them. A cargo of highly insured but worthless goods was shipped at a French port in a steamer, and in the midst of the cargo an infernal machine, intended to explode, destroy the ship and cargo, and earn the insurance money for the miscreant conspirators. The machine was a sort of chest, provided with explosive compound, an exploding apparatus, train of clockwork, primed cartridge, trigger or striking needle—the clockwork being timed to produce the explosion in a given number of days after leaving port. An occurrence at Bremerhaven a year or so ago afforded a further illustration of this application of scientific discovery and mechanical invention to purposes at once fraudulent and barbarous. Whether any case is on record of the *coal-torpedo* having been really applied to its Satanic purpose, we do not know; but that such a thing exists is certain. It is a hollow shell of iron, carefully

moulded from a lump of coal, and blacked to look like coal; an irregular cube of a few inches on each side, and filled with terrible combustibles of the dynamite kind. What does this mean? It means that a steamer laden with almost worthless goods insured at a very high value has a coal-torpedo purposely mixed with the coal in her bunkers, ready to explode whenever thrown into the furnace, or perhaps before! Another infamous contrivance, darkly hinted at, is the *rat-torpedo*, which, placed secretly in the hull of a ship, will after a time explode, and burst a hole in the ship's bottom. Specimens of these two kinds have come into the hands of European and American governments.

The Easter Monday torpedo in a place of public amusement, whatever it may have meant, was only one (the reader will perceive) among many forms of cylindrical, cigar, cubic, and globular missiles, of the 'infernal machine' character.

In the war lately commenced between Russia and Turkey, torpedoes are playing a notable part. The Russians, having a weaker navy than their antagonists, supplement the deficiency by employing these subtle agents. One Turkish war-vessel, guarding the passage of the Danube, has unquestionably been blown to pieces by Russian torpedoes, and its crew destroyed. The Russians have shewn much daring in approaching Turkish ships during the dark hours of night, attaching torpedoes to the ships' bottoms, retiring quietly and swiftly, and leaving the explosive monsters to do their fell work. On the other hand, torpedo-defence has been practised with some success by the Turks—preventing the approach of torpedo-vessels, or fishing up the torpedoes themselves before they explode. Torpedo-tactics, in the naval warfare of the future, will evidently embrace the two parts of torpedo-attack and torpedo-defence. Where is it all to end?

CROSS-PURPOSES.

IN TWO CHAPTERS.—CHAPTER I.

'Is it very bad? Do you think it will mark her? How unfortunate I am.'

'Oh, it won't signify—*much*,' says the major, making a feeble attempt at consolation.

The groom is on his knees washing down the mare's leg. As he washes, the red raw patch shews out with ominous distinctness from the glossy dark-brown skin that surrounds it; and Cissy, standing in her riding-habit, whip in hand, regarding the operation, begins to look the very picture of ill-concealed misery.

'How dreadfully bad it looks *now*,' she says fearfully.

'Not at all,' replies the major.

'I cannot imagine how it happened; she is usually such a clean jumper,' goes on Cissy, diligently searching for excuses. 'I never in my life injured a mount before, and I would not have harmed this one for all the world. Captain Halkett will be so awfully angry.'

'Nonsense! You don't suppose he will *bite* you, do you? Think of his angelic temper and your privileges as a woman. He daren't blow you up, you know.'

'It is not so much *that*,'—with hesitation. 'Of course I know he will *say* nothing, but he will *think* the more; and'—

'Like the parrot,' interrupts the major.

'And he will look so annoyed,' goes on Cissy, torturing herself with immense success. 'I would not for anything it had occurred. I do think I am the unluckiest girl on earth.'

'Are you in love with him?' suddenly asks the major sharply.

'In love with him? What an absurd question! Of course I am not,' says Cissy angrily, while blushing in the most furious and uncalled-for manner. 'What can have put such a ridiculous idea into your head?'

'Well' (sulkily), 'you are so afraid of vexing him, for one thing.'

'Not a bit more afraid of him than I would be of you or any other man, under the circumstances,' declares Cissy with exemplary candour. 'But it is not a pleasant thing at any time to injure a favourite hunter; and the mare, for some reason or other, is a special darling with Captain Halkett. Indeed, it was only yesterday I heard him saying he valued her more than any animal he had ever had.'

'Given him by one of the fair sex, most likely,' says the major with vicious intent.

'Very probably,' returns Cissy quietly, who carries a very game little heart beneath her pretty Irish skin, and would have died rather than betray any undue emotion. Nevertheless, it must be confessed her colour faintly wavers and fades away a little, only to return with tenfold brilliancy as she sees Captain Halkett pass the stable window.

'Here he is!' she cries hurriedly. 'Now, what shall I do?'

'Nothing, if my advice is worth anything,' says the major sententiously.

Captain Halkett coming slowly up the yard, cigar in mouth as usual, and hands thrust deep in the pockets of his shooting-coat, sees Cissy, Major Blake—and the groom on his knees beside the mare. He takes in the whole situation at a glance. Throwing away his cigar, he turns to Cissy, and says pleasantly: 'Good-morning, Miss Mordaunt. Had a good day, I hope!'

'Yes; thanks—very—that is, *no*, not at all,' says Cissy nervously. 'I am afraid you will be horribly angry. But the fact is, as Major Blake and I were coming quietly home—cantering through the Park fields, at the last gap some sharp stone caught the Baby's leg, and has hurt her, as you see. I—I am so very sorry about it,' concludes Miss Mordaunt, genuinely vexed for the mishap.

'Don't say that,' entreats Halkett gently; 'and don't vex yourself. I would rather the mare was dead, than that you tormented yourself about her. Besides—stooping to examine the injury—from what I can see it is only skin-deep, and won't matter in a day or two; eh, Connor?'

'Yessir; only a scratch, sir. Right as ever in a week, sir.'

These words carry balm to Miss Mordaunt's breast; and presently the bandages being finally adjusted, and the Baby consoled by an additional feed, they leave the stables; and Blake considerably diverging to the right, Miss Mordaunt and Halkett go leisurely towards the house.

As they reach the stone steps leading to the

Hall door, Cissy pauses. 'You are *sure* you forgive me?' she asks sweetly.

'How can you speak to me like that!' says Halkett, almost angry. 'Did you think I should cut up rough with *you*? What an ill-tempered brute you must consider me; you ought to know me better by this time.'

'I have not known you for so very long,' says Cissy smiling; then impulsively, while her colour once more deepens: 'Why is that horse such a favourite with you?—beyond all others, I mean. Was it a present?'

'Yes,' says Halkett in a low voice.

'From a very dear friend?'

'Very dear; more than a *friend*.'

'From—a gentleman?'

'No. From a lady,' says Halkett shortly, and turns away his head.

On the instant, the words the major had uttered in the stables come back to Miss Mordaunt's mind, and without further comment she sweeps past Halkett into the house, and he sees her no more until dinner-time.

When half-past seven chimes out, and the solemn retainer of the House of Mordaunt announces dinner as being served, both Major Blake and Captain Halkett make a hard fight of it to take Miss Cissy down; but Fate, in the person of Sir Thomas Lobin, interferes, and balks them of their prey. Halkett, however, may be said to have the best of it, as he succeeds in seating himself directly opposite his Irish divinity, and so can watch the changes of her beloved face, and perhaps edge in a word or two, addressed particularly to her, during the repast. All this can be the more readily accomplished, as he has been told off to a young lady who, if not actually insane, is at all events three parts silly, and so does not feel it incumbent upon him to supply her with the orthodox amount of small-talk.

Major Blake falling into line, finds himself presently situated somewhat low down, with Mrs Fairfax on one side of him, and Grace Elton, a cousin of Cissy's, on the other. If it were not that his thoughts are altogether centred on Miss Mordaunt, he might have considered himself in luck, as he is undoubtedly in very good quarters. Grace Elton is as unaffected as she is charming, and extremely pretty into the bargain. But the major will neither acknowledge nor see anything beyond the tip of Cissy's nose, as it shews itself provokingly every now and then from behind the epergne.

On a line with Sir Thomas, and the third from him, sits Mrs Leyton the Indian widow, in a ravishing costume of pearl and blue that speaks alone of worth. She is looking wonderfully handsome to-night, and has a bright adorable spot on each cheek that is *not* born of rouge. She is keeping her hand in by trying a little mild flirtation with the vicar, who occupies her right, and is making very pretty play; while his daughter—who is almost too young for society—watching them from the opposite side, finds her mind much exercised, and wonders in her heart if Mrs Leyton is *really* very fond of papa. Surely she *must* be; else why does she raise her large soft dark eyes so tenderly to his once in every three minutes precisely, by the marble clock on the chimney-piece?

Aunt Isabel, at the head of the table, is radiant as usual, and dispenses roast turkey and smiles

with equal alacrity. She is carving with even more than her customary vigour and well-known proficiency, while at the same time she is listening to and adding a word here and there to every topic under discussion. She is, however, particularly attentive to Miss Lobin, who sits beside her, and who is as deaf as a post; though no trouble to any one except herself, poor lady, as she seeks not for conversation, and as long as she gets a bit of everything mentioned in the *menu*, is perfectly content.

There are two or three stray men from the neighbouring barracks scattered up and down; and these, with the three Misses Brighton—who being evidently not cut out by mother Nature for the civil service, have been considered suitable to ask to meet them—make up the party.

'Well, Cis, you had a pleasant day, I hope?' says Uncle Charlie, presently addressing his favourite niece.

'A delicious day, dear uncle; only we wound up with a misfortune. I was stupid enough to hurt Captain Halkett's horse on my way home through the Park; though indeed I scarcely think it was my fault. However, as it *was* to happen, we were lucky in having it occur at the end, instead of the beginning of our day, as we had our ride in spite of it.'

As she makes this little speech, she never once glances at Halkett (indeed she has taken no notice of him since the commencement of dinner), and purposely treats the whole thing as unworthy of regret. Halkett, contrasting her pretty contrition of the morning with this off-hand dismissal of the matter, is, manlike, thoroughly mystified.

'I am sorry to hear of an accident,' says Uncle Charlie, who holds all good animals dear to his heart.—'Nothing serious, I hope, Frank?'

'A mere scratch,' returns Halkett carelessly.

'That is right. It could not have happened through any great desire on the rider's part to reach her home, as she delayed her return so long we all imagined an elopement had taken place. But there was no such excitement in store for us.—I do think, as your guardian and uncle, Cis, I have every right to know what you and the major were talking of all that time.'

'Politics,' says the major lightly; 'we never talk anything but politics.—Do we, Miss Mordaunt?'

Here Blake dodges to one side of the epergne, that he may the more surely get a full view of Miss Mordaunt's face.

'*Never*,' replies Cissy emphatically, dodging the epergne in her turn; and then they both laugh.

Here Halkett mutters something under his breath that is so far audible as to rouse the silly young lady by his side into some kind of life. She sighs and uplifts her head.

'Were you speaking to me?' she asks in a somewhat startled tone.

'No—yes—was I?' stammers Halkett, rather shocked. 'I *ought* to have been, of course; but I have fallen so low as to allow dinner to engross all my attention. Pray, forgive me. It comes entirely of going down to dinner with a middle-aged gourmet.'

'Dear me—I fancied you quite young,' responds his companion with a simper; and lapses again into silence after the effort.

'Politics!' says Uncle Charlie, going back to the subject, after he has desired the butler to take

several different dishes to Miss Lobin. 'How you must have enjoyed yourselves—especially Cissy. I never met any woman with such keen and comprehensive views on all matters connected with the state. It was only yesterday I asked her opinion of Gladstone, and she told me she always thought he was'—

'Now—Uncle Charlie,' interrupts Miss Mordaunt with such indignation, that the old gentleman, though chuckling to himself, audibly refuses all further information.

'May we not hear your opinion of Gladstone?' demands Sir Thomas, who is an old bean, and much addicted to Miss Mordaunt.

'Certainly not. And remember I distinctly forbid you to ask Uncle Charlie any questions when my back is turned; as he is capable of saying *anything* once my eye is off him.'

Your will is my law,' says the old bean with a bow that would have reflected credit on a Chesterfield; and shortly afterwards, at a signal from Aunt Isabel, the ladies rising, leave the gentlemen to their own devices.

On entering the drawing-room, Mrs Leyton walking with the undulating graceful motion that belongs to her, and that cannot be acquired, goes straight to the fireplace, where she sinks into a lounging-chair, leaving the opposite one for Aunt Isabel, who almost instantly falls into a gentle doze. Little Miss Millar, the vicar's daughter, losing sight of her shyness in her desire to obtain her object, seeks a resting-place that will enable her still to keep a fascinated watch over Mrs Leyton, the widow having cast a glamour over the timid country maiden. The Misses Brighton and Grace Elton keep up a continual chatter, and are evidently enjoying themselves immensely; while Miss Lobin taking the cosy corner of the sofa, emulates her hostess, and letting her face lengthen until it reaches a state of utter imbecility, sweetly snoozes.

Cissy is standing in one of the windows, somewhat apart; she gazes out upon the stilly night, and softly cogitates. She cannot quite make up her mind whether she has been most sinned against or sinning; she cannot wholly approve her conduct at dinner, and finds it impossible to divest herself entirely of the idea that Halkett was looking miserable the entire time. But all men make a point of appearing injured when placed in the wrong position, and of course he had not liked her cross-examination of the morning. Yet again, why should he *not* receive presents from women? What right had she to question act or word of his? No matter what thoughts and hopes she may have encouraged in the secret recesses of her heart, she feels now she has no certain data to go upon to prove that Halkett cares for her beyond all others. Somebody—who was it?—had said he was a flirt. Well, one thing was positive—he should not flirt with her.

Here Aunt Isabel, slowly rousing, sneezes, and henas audibly, to let her friends know she has not been sleeping.

'Cissy, child,' she says, 'you will be perished over there. Come to the fire and warm yourself.'

'I am warm, thank you, and quite comfortable.'

'My love, I don't believe it' (with extreme mildness); 'it is freezing as hard as it can, and there is always a draught near a window. Come here, when I desire you.'

'Oh, I shall die near that blazing log.'

'And I shall die if you remain over there,' says Aunt Isabel; and carries her point.

'Better I than you, Auntie,' says Miss Mordaunt, and coming over, good-humouredly kneels down beside her kinswoman.

'Cold hands—warm heart,' murmurs the old lady, caressing the soft white fingers that lie upon her lap.

'A troublesome possession,' remarks Mrs Leyton with a lazy smile. 'No one is *really* happy in this world except he or she who carries an empty bosom.'

'Are you happy?' asks Miss Cissy innocently.

'Almost. The little worn-out article that beats here'—laying her hand over the region of the heart—'has pulsations hardly strong enough to cause me any uneasiness. Now and then I feel a faint pang—not often.'

'I would rather keep my heart, even at the expense of my suffering,' says Cissy warmly. 'She who cannot feel anguish, can know no perfect joy. Without love, life is a mistake, an utterly stupid gift. That is how I think; but then I am Irish, and therefore of course unreasonable.'

'O no,' says Mrs Leyton graciously. 'The Irish are the most charming people in the world—so light-hearted, so quick to sympathise. Though I have been here only two days, and have asked no questions, I knew you to be Irish before you told me. Most of my friends come from your land; even Captain Halkett is half Irish, his mother being from Galway.'

'Yes!' says Cissy. She rather shrinks from mention of Halkett's name, and remembers with a slight pang how friendly have seemed his relations with Mrs Leyton since her arrival. 'Have you known Captain Halkett long?' she cannot help asking.

'All my life. His father and mine were fast friends; our childhood was spent together. Then we separated'—with a sigh, that sounds ominous to Cissy, but in reality is only born of past sorrow, utterly unconnected with him in any way—'to meet again after many years in India, and now—here. One way or another, all through, Frank's life has been mixed up with mine.'

Cissy bites her lip, and asks no more questions; but Mrs Leyton notices the action of the white teeth, and ponders.

'There is a great charm in Frank's manner, I think,' she says interrogatively.

'Is there? Most men nowadays are charming, as acquaintances,' replies Cissy carelessly. 'And Captain Halkett is too universal a favourite to be altogether charming to one.'

'Poor Frank!' laughs the widow lightly. 'He is unfortunate; or at least has found some one who cannot appreciate him. Then you mean to say you would find it impossible to care for any man who liked some other woman besides yourself?'

'Well, as you ask me the question, I confess I would,' says Cissy, who is feeling irritated, she scarcely knows why. 'I would divide honours with no one, and I would be winner—or nothing.'

'Then the man you love must be civil to no one else?'—with arched eyebrows indicative of surprise.

'Oh, "*civil*." Let him be as civil as he pleases. If you were talking merely of civility, I altogether misunderstood you. I only meant if I had a lover

—which at the present moment I certainly have not—I would wish to be first in his eyes. Let him be *civil* to all the world, but let him love me.

‘Quite so; that is only fair, I think,’ says the widow, but she looks immensely amused; and Cissy seeing her expression, feels her wrath rising. ‘I quite thought—judging from appearances—that you and Captain Halkett were very good friends,’ goes on Mrs Leyton unwisely, and regrets her speech a moment later.

‘I beg you will not judge me from appearances,’ says Miss Mordaunt haughtily. ‘A woman of the world as you are, Mrs Leyton, ought surely to know that people for the most part do not always feel everything they may look. And besides, you must forgive me; but if there is one thing I have a particular objection to, it is being watched and commented upon.’

‘You are right,’ returns Mrs Leyton with suspicious sweetness; ‘I fear I have been very indiscreet; for the future I will not watch you and Captain Halkett.’

There is a covert meaning in this speech that is absolutely maddening; but the entrance of the gentlemen puts a stop to Miss Mordaunt’s reply. She withdraws slowly, and seats herself upon a distant lounge, where she is immediately joined by Major Blake.

‘I hope you have missed me,’ he says with a tender glance, pushing aside her trailing skirts that he may gain room for his huge person. ‘I assure you the time those men spent over their wine was actionable; while I was tantalised by dreams of fair women the entire two hours.’

‘Two hours! What an exaggeration. Why, by Aunt Isabel’s watch, that was never known to lose a minute, it was only half an hour.’

‘What to me was two hours, to you was but a fourth of the time. How cruel an interpretation may be put upon your words! And I have been buoying myself up with the hope while absent from you, that when we *did* meet again, I should hear something kind from your lips.’

‘And so you shall,’ says Miss Mordaunt, bestowing upon him a radiant smile, just to let ‘that woman’ see she is not pining for the recreant Frank. But unfortunately for the success of the thing, Mrs Leyton is looking the other way, and does not see it at all, while Frank Halkett does.

‘Must I confess to you? Well, then, my accurate knowledge of the hour arose from my incessant glances at the watch, to see if your delay in coming was really as long as it appeared—to me.’

‘If I thought you meant that!’ begins Blake hesitatingly, with a sudden gleam in his eyes (what man but feels more valiant after dinner than before?).—‘If I really thought you meant it?’

‘Well—“if you really thought I meant it”—what would you do then? But no!’ she cries basily, seeing she has gone rather far, and unwilling to bring matters to a climax—‘do not tell me; I do not wish to know. My ignorance in this case no doubt is blissful; I prefer to remain in it.—And now to change the subject. Who is Mrs Leyton? and what do you know about her? I am all curiosity where she is concerned.’

‘Do you like her?’ asks Blake, merely as a precautionary measure.

‘I can’t say I do—exactly,’ replies the Irish girl candidly. ‘Now tell me where you first met her.’

‘In India. Her husband was alive when I first

became acquainted with her. He lived tremendously hard; but he was devoted to her, without doubt, and she to him; and she took his death awfully badly. Never saw a woman so cut up by anything before; they generally take it pretty sensibly after the first shock, but she didn’t; and went to a skeleton in less than three months.’

‘She is not very thin now.’

‘No. I suppose one can’t keep on pining for ever, and in course of time good food will cover one’s bones. But she felt it no end for months, and was altogether down in her luck. You see he got rather a horrible death, as his horse first threw him, and then almost trampled him beyond recognition.’

‘How dreadful!’ murmurs Miss Mordaunt, with a little shiver; and wonders how Mrs Leyton could ever have smiled afterwards.

‘Yes; wasn’t it? She took it so much to heart, that for years after she could not bear the sight of a horse, though she had the best seat in the regiment—amongst the women, I mean—and could not be induced to take a ride. Before leaving India, she sold, or gave away, every one of her horses.’

Here Cissy becomes intensely interested. ‘To whom did she give them?’ she asks indifferently.

‘I hardly know; I was up-country at the time, but her most intimate friends, I suppose.—By-the-bye, Halkett was an immense crony of hers.’

‘Indeed?’

‘Never out of the house,’ says the major, thinking it a good opportunity to improve his own chances, though really only giving voice to what had been the common report in that part of India where the catastrophe had occurred. ‘After Tom Leyton’s death, he would have married her like a shot; but she would not hear of it. She is a very handsome woman, you know, and tremendously admired by some fellows, though for my part I don’t altogether see it.’

‘Don’t you? I think her wonderfully pretty. Perhaps she will relent, and marry him now; who knows? Certainly his constancy deserves some reward. Was it Mrs Leyton gave him the mare?’

‘Don’t know, I’m sure. But think it very likely, now you mention it, as he sets such uncommon store by her.—How very well Mrs Leyton is looking just now,’ says the major, adjusting his eyeglass with much care, and glancing significantly at the other end of the room, where sits the widow in earnest conversation with Frank Halkett. Cissy follows the direction of his gaze, but, conscious of his scrutiny, takes care that not one muscle of her face betrays what she is really feeling.

Yes, very well, very handsome looks Mrs Leyton, as leaning gracefully back in her chair, with one hand toying idly with the rings that cover her fingers, she listens to Captain Halkett’s conversation. Now and then she raises large dreamy eyes—half mirthful, half sympathetic—to his face, but scarcely interrupts him. He is talking with much earnestness—is apparently entirely engrossed by his subject—and takes no heed of what is going on around him. Presently he ceases, and evidently seeks an answer from his beautiful companion. She gives him one of her upward glances—all sympathy this time—and says a few words; but they are without doubt the right ones, as Halkett’s face brightens, and a smile overspreads it that makes it positively handsome. At the moment he

raises her hand, and bending over it, seems to examine her rings curiously. To Cissy the action almost bespeaks a betrothal, and renders her half indignant, wholly miserable. Nevertheless, turning to Major Blake, she says with a bright brave smile: 'I think my idea was right, and even now he has received his reward.'

'Looks uncommon like it,' says the major with a sigh of relief.

NOTES FROM CHINA.

A MEDICAL gentleman at one time resident in China furnishes the following notes of interesting incidents within his knowledge. Though roughly put together, they may amuse our readers and be relied on as true.

In the month of January 1869, at about half-past seven P.M., I was sitting at dinner in my house in Swatow, when a sailor from the small gun-boat at that time in Swatow Harbour came running breathless and hatless, asking me to come down without any delay to the hospital, which I had built in the Chinese town on the side of the river opposite my own house. This man said there were thirteen sailors and the captain of the gun-boat badly wounded by an unprovoked attack of the Chinese. This looked serious indeed; so putting up instruments, lint, &c. I hastened down with the sailor. On reaching the hospital, the un-wounded men of the gun-boat were still carrying into the hospital their injured comrades. I never saw a set of men so severely wounded without any being fatally so. I set to work, and extracted fifteen bullets from the men; but some were too deeply imbedded to get at that night. One man had one ear shot off, a second two fingers, a third was hit in the eye, a fourth shot in the breast, and I afterwards extracted the bullet at his back. The captain of the gun-boat had on a very thick shaggy pilot-coat, double on the breast; a bullet had cut right across his chest; and on examination I found the skin just raised where it had passed. A very singular wound was that of a young officer, whose two front teeth were knocked in by a bullet, that then disappeared somewhere in his palate. I never could find this bullet whilst he was under my care; but it seemed not to have done him much harm. He left Swatow; and I saw him three or four years later, and he said the lead had never appeared, and he had suffered no inconvenience from it. I believe it must have worked itself somewhere into the muscles at the back of his neck.

The cause of this raid of the Chinese was this: the captain of the gun-boat had merely taken out twenty-five men to exercise by rowing one of his boats up the river Han, on which Swatow is situated. This river is very wide at the mouth, and abounds in large creeks; on the banks of one of the largest of these, next to Swatow, are built three fortified walled-in villages, or what we should call *towns*, from their large population. The inhabitants of these towns were well known as

being particularly lawless, not having paid taxes for many years, and setting the mandarins at defiance. Seeing the foreigners (whom they detest) rowing up the creek, 'the Braves' (as they call themselves) rushed out in hundreds and fired into the gun-boat from each side of the river; and were it not for the nature of their guns, or as the Chinese call them 'gingals,' which are old-fashioned and of short range, none of the boat's crew would have returned alive; as it was, fourteen men were well riddled; and the boat, which I saw afterwards, had as many holes in it as a colander. The sailors rowed away for their lives, and escaped.

Our settlement, on hearing this story, was in great and just alarm. These people detest the foreigners; and having put to flight their supposed enemies in a crippled state, it was very likely they might follow this up by an attack on the settlers; and had they only sufficient courage, their numbers were so great, that our fate would have soon been decided by pillage and murder. The British consul, Mr Alabaster Challoner, saw the danger; and being a man of decided character and great energy, without any delay sent a merchant-ship that was in the harbour under high steam-pressure to Hong-kong to inform the Admiral of what had happened. The reply was prompt and satisfactory; for a few hours brought Admiral Keppel, Lord Charles M. Scott (son of the Duke of Buccleuch), two frigates, and seven gun-boats into Swatow Harbour, to the great satisfaction of the foreign settlers and of Mr Challoner. This gentleman was a small delicate-looking man, whose neck being a little crooked, made him hold his head on one side; but such was his courage, determination, and inflexible sense of justice, that the stoutest Chinese officials trembled at his look; and they all declared they would rather face a tiger than meet the glare of 'His Excellency the Devil's' eyes when displeased. The Admiral immediately told off five hundred marines and blue-jackets, fully armed and supplied with two small cannon, to punish the offenders. The friendly natives of Swatow averred loudly that these men were going to certain destruction; that not one would return, as the tribe in question was invincible; and most of the foreign merchants were sufficiently alarmed by these assertions to send all their most valuable possessions on board the vessels in the harbour. Fortunately the result was not what they dreaded. On approaching the first town, the troops saw 'the Braves' in vast numbers on the walls, shouting, waving flags, jumping up and down, and calling on them to come on and be killed. The tars replied by blowing open the gates with gunpowder, and falling on the heroes, who instantly gave way and fled precipitately. They then set fire to the place, sparing all who did not resist. They treated the other towns similarly, and returned victorious. The excellent effect of this prompt action was to produce a complete tranquillity in the neighbourhood of Swatow, which has remained undisturbed ever since (eight years), and a feeling of security which never before existed; yet the Admiral was reproved by the British government at that time for having acted without 'home orders!'

In the winter of 1873 a very unseaworthy merchant sailing-vessel (a Siamese), the *Tye Wat*, set out from the north of China to Siam with a

cargo of bean-cake, &c. The weather became excessively stormy, and at last the old vessel actually went to pieces many miles from land in the Gulf of Pe-chu-le. The crew consisted of eight Malays, who worked the ship; the captain, an Englishman; and in addition was one Chinese woman. They had no boats on board, no time to make a raft or means of doing so; and as the vessel was rapidly sinking, the wretched people looked round in despair; when a hope of escape struck one of them as his eye lighted on a very large wooden water-tank which was on deck. This tank was strongly made, about six feet long, five feet across, and five feet high, with a large hole at the top into which a man could squeeze, and a tight-fitting cover. There was not a moment to lose: a hole was bored in the bottom, to let out what water it contained, then quickly plugged; and all ten squeezed themselves in hurriedly, put on the lid, and awaited their fate. In a quarter of an hour after they were thus packed, the ship sunk under them. They first whirled round, and then floated off freely, and felt themselves rolling and tossing about frightfully on a stormy sea. The weather was intensely cold, so much so that icicles had hung from the rigging of the sunken ship the day before; and being so tightly packed, perhaps it was fortunate the weather was so cold. In their haste to save life, they had brought only part of a ham which the captain had snatched up, and a bottle of brandy; and thus these poor creatures were tossed about from day to day, hungry and thirsty, jostled like potatoes shaken in a barrel; now and then, when they dared, letting in a little air by raising the lid. Their situation strongly reminds one of Gulliver in his box when the eagle carried him out to sea from the land of the Broddingsnags.

On the fifth day the Malays said they must kill and eat the English captain; but the poor Chinese woman (to the credit of her sex) vehemently opposed them, and succeeded in saving him for that day. On the sixth day the Malays said they must eat her; but the captain in turn saved her for that day. It is difficult to imagine a more horrible situation than that of this poor Englishman surrounded by eight starving men determined to eat him, which they certainly would have done had not an English vessel rescued them on the seventh day. It happened thus: the captain of that vessel sighted a large box tossing on the waters, and at first never thought of minding it, only supposing it part of some wreck, as the weather was so bad; but as he looked, to his utter surprise a head popped up through the hole in the centre, and then vanished, to be followed by another figure, making frantic gesticulations. With much difficulty this strange box was got alongside, hauled up, and its poor inmates dragged out to light barely alive, and emaciated fearfully, finding the man-hole easier to pass out of than to get into; which was reversing the fable of the weasel who got into the barn. The captain of the rescuing vessel was a kind Englishman, and did all in his power to restore his guests. They were still in the Gulf of Pe-chu-le; and did not reach the port of Swatow sooner than six days, where a doctor was called in to visit these liberated 'Jacks-in-a-box.' He said they were a singular proof of how much human beings can endure. All lived, and recovered perfectly. Certainly they were all young

people. The Malays went home. The English captain went to Singapore, and shewed himself really grateful to the poor Chinese woman who had saved him from the jaws of the Malays.

UNSUSPECTED WAYS OF EARNING A LIVELIHOOD.

'WHY, sir, we never should wake of our own accord, specially these dark mornings, if we hadn't somebody to knock us up.'

The speaker was a worthy artisan whom I often used to meet at a certain steam-boat pier on the Thames; his after-breakfast labours appearing to begin about the time I usually was in waiting for the boat.

'You see, sir,' he continued in answer to a question I had put to him—'you see, sir, there's about sixty of us hereabouts down by the water-side; and there's so much that depends upon the tide, that we have to be called at all hours—sometimes two o'clock in the morning, or three or four, just as the case may be.'

'But who is it calls you?' I asked. 'A policeman, I suppose?'

'No; not a policeman; my companion answered; 'it would take up a deal too much of his time; besides, fresh policemen are always coming on to the boat, and we could not be bothered with constantly having to shew and tell a new man the way.'

'Well, it must be rather an awkward matter,' I observed.

'No; it isn't. We each pay fourpence a week to Phil Larkins; and he wakes us as regular as clock-work.'

'But if sixty people want to be called at all sorts of irregular hours, how does the awakener manage to know his duties?' I asked.

'Oh, we chalk on our doors or shutters the time, and that way he knows. Phil is to be depended upon always. But he very nearly lost the work a year ago, and it was a shame. Some fellow wanted to step into his shoes, and morning after morning went and altered the chalkings, so that we were either called two hours before our time, or overslept ourselves, and so got into trouble. There was no end of quarrels and misunderstandings till the trick was found out. And I think the rascal who did it deserved a ducking—only, you see Phil is such a little fellow he couldn't give it him.'

'It was a dastardly trick!' I exclaimed with indignation, bidding the man good-bye.

Another speaking acquaintance of mine was an old man whose duty consisted in sweeping down the steps which were submerged at high-tide, but quite bare at low-water. I had often seen him at work cleansing from mud and silt step by step as the tide receded; and now it occurred to me that from the nature of his occupation he, of all others, must work at the most irregular hours. It was a dull wintry morning, but the old man was working cheerfully at his accustomed task, which, as the water was getting low, was very nearly completed. He was pale and thin, but had that air of decent respectability which happily is often seen in the very humblest classes.

I opened the conversation in true English

fashion by a remark on the weather, asking his opinion as to the probability of rain.

'Snow more likely,' he answered laconically, but quite civilly.

'I daresay you are right,' was my reply, 'for I should think you are one of the weather-wise people.'

'Ought to be, if there's anything learned in being always twelve hours in the four-and-twenty out of doors all seasons,' was the rejoinder.

'Rather hard work for you, my man,' I said sympathisingly.

'I don't complain. There's lighter work to be sure, but there's some that's a deal heavier; and after being at it so many years, maybe it comes easier to me than it would to another. I was only fifty-five when I began, and now I'm seventy-three.'

'And is it necessary that you should work all the six hours that the tide is ebbing?' I asked, really desiring the information.

'Quite necessary,' he replied, descending a step, and plying his broom vigorously as he spoke. 'Why, if I did not begin at the beginning and go on regularly, the mud would harden, and I should have to drag up buckets of water to wash the steps with. And gentlefolks want nice clean steps going to the boats.'

'I suppose you are glad when your work does not happen to be in the dead of the night?' I observed.

'I don't know that I care. It is the change in the time that makes the variety in the work. And sometimes on fine nights, when the stars are blinking and twinkling, or the moon floating in the sky, with the clouds rushing along as if every now and then they were washing her face—I think things and feel things as I don't at other times. I think it's a mistake for people always to sleep of nights, I do.'

'I suppose you depend on some one to call you up at the turn of the tide?' I said inquiringly.

'No; I don't,' replied the old man, with a shake of his head. 'I tried that at first, but it didn't answer. I daresay Larkins might do it; but it was before he took to the business of knocking at doors; and the man I trusted to made mistakes or else forgot, and didn't wake me right, and I very nearly lost the place; and ever since I have trusted to myself.'

'Then how do you manage?' I said.

'That is just what I don't know, except that it seems to me it is managed for me. I only know that if it is high-water in the dearest hour of the night, I always do wake. It is just as if something said: "Look alive; time's up;" and sure enough it always is. I often wonder at it; but I have come to think that wondering is of no more use than wondering at the tides coming up so surely, and the new moons shining just as they are expected, and the stars all keeping their places so safely. O sir, some folks, no doubt, are very learned, but there's a deal more in the world than people can ever make out.'

'Do you know, my friend, that you are speaking the thoughts of one of the greatest of men?' I exclaimed, reflecting on Hamlet's words to Horatio.

'Am I? What did he say?' was the rejoinder.

'He said,' I exclaimed, '"there are more things in heaven and earth than are dreamt of in our philosophy."'

'Well, he was right, whoever he was,' exclaimed the old man, with a sort of innocent satisfaction at his own corroboration of a great man's words. 'And what's more, I think the world would be a worse place than it is if we had nothing left to wonder at.'

'I heartily agree with you,' was my reply.

'And there's more to wonder at than even the stars and the tides,' continued the sweeper, 'and that's the ways of men, the good and the bad that's in the most of us. But then I do think we river-side people see more than others, what with the partings and meetings going on; and now and again the dead bodies that come to shore, and sometimes the miserable despairing people who would drown themselves if they weren't hindered. Well, it's these things that set me wondering and thinking, and that make the working hours pass quickly, especially at night.'

'You seem a bit of a philosopher,' I said admiringly.

'What's that?' cried the old man.

'It means lover of wisdom,' I replied; 'and he is happy who can justly lay claim to the title. My friend, we must have another talk another day.'

'Well, sir, you'll always find me here according to the tide; leastways unless I am ill again, as I was last year.'

'How was that?' I asked.

'Well, I don't quite know myself,' the old man answered, 'for I don't remember much about it. When they found the steps neglected, some of the wharf people came to look after me, and then they took me off to the hospital, where I was for a matter of six weeks. You see, sir, since my poor old missus died I am all alone, for my grandson went to sea; his father is a soldier; and my daughter has been in service these thirty years; so I had no one to go for a doctor or give me a drink of water.'

'Oh, that was very sad,' I exclaimed.

'Well, it was rather hard lines; but you see no one knew how I was taken; and when they found me, folks were mighty good to me, and they gave me back my place when I got well; so I ought not to complain.'

The boat by which I travel was now nearing the pier, and I stepped on board, with a friendly nod to the old man, reflecting with some sympathy on the many such stories which doubtless, if he knew them, would serve to swell

'The short and simple annals of the poor.'

FROTH.

CHILDREN sometimes ask, and men and women need not be ashamed to ask, why is froth always white or nearly white, whatever may be the colour of the liquid underneath it? To answer the question, we shall have to determine what froth really is in itself, and how it is formed.

Take a filled ale-jug, or the well-known 'pewter' of a tavern or public-house, and pour out gently into a glass; scarcely any froth is produced. Pour out the self-same liquor from the self-same vessel in a stream several inches high, and you produce a foaming 'head,' which to the eye seems to be a substance quite different from ale or beer. Open a bottle of lemonade or ginger-beer, of soda-water

or seltzer-water, and pour out the contents into a glass; the formation of froth is so rapid and abundant that the glass appears full when it really contains but a small quantity of liquid. Open a bottle of Bass's ale or of Guinness's stout; the froth is still more opaque and pronounced. Look at a cup of tea or coffee soon after the sugar has been added; there will often be seen a small covering of froth on the surface, which froth, if not actually white, is much more so than the liquid beneath. Watch the movements of the paddle-wheels of a steamer; the water thrown back from them is covered with foam of dazzling whiteness, the intensity of the white increasing with the rapidity of the wheels' motion.

In all these cases, and in multitudes of like kind, the froth seems to result from agitation; a quiescent liquid seldom presents symptoms of this nature. But agitation alone would not do it. Supposing it were possible for human beings to live, or for pints of ale to exist, without air, there would be no such thing as froth. In pouring out ale or other liquid, the falling stream becomes mingled with a portion of the atmospheric air which surrounds us; and it also buries, as it were, the air contained in the apparently empty glass: the result is, a mixture of ale and air, instead of ale only. Under ordinary circumstances, liquids contain as much air as they are capable of absorbing; the additional quantity is expelled. But how? It cannot rise in a body to the surface, but divides into minute spherical portions or air-bubbles, which ascend to the top of the liquid on account of their levity or comparative lightness.

This, however, is not all; if it were, the bubbles would burst directly they come to the surface, and froth would not have an opportunity of forming. Cohesion comes into action, the cohesion between the particles of every liquid. The bubbles of air, as they rise from the body of the ale, beer, or other liquid, are able to penetrate between the particles; but when they arrive at the surface they encounter a film of liquid cohesive enough to restrain for a time their final escape into the atmosphere. Froth consists of bubbles, each a tiny globular portion of air, bounded on the upper surface by an exceedingly thin film of liquid; the bubbles retain this position and condition until the struggle ends as a victory for one of the belligerents. The ascensive power of the air within the bubble overcomes the cohesive power of the liquid film or covering, and 'the bubble bursts'—our beverage loses its frothy 'head.' The length of time that elapses before the air escapes by the bursting of the bubble depends chiefly on the viscosity of the liquid. If we pour ale into one vessel and water into another, from equal heights, we shall find that the former will present a frothy surface, the latter a more instantaneous sparkling appearance; the power of retention being greater in the former instance than in the latter. In other words, ale having a greater specific gravity than water, and also greater viscosity, the bubble formed has a thicker coating, and requires a longer time for its disruption. Taking the round of all the 'frothy headings,' we find the same rule prevail. In the spray from the paddle of a steamboat, in the froth on the surface of beverages, in the sparkles on a cup of tea, the air is in the first place entangled among the particles of liquid, and thus forms bubbles in

the struggle to escape. Although carbonic acid may, in regard to physical properties, be ranked as a kind of air, the formation of froth in effervescing liquids is slightly different.

But why is froth *white*? Porter, ale, tea, coffee, champagne, water, differ very considerably in colour; yet in all of these, when froth is produced it is white. This appears to be due to the reflection of the light from the outer surface of the several bubbles. When the surface is thus broken up, we have a cluster of little spheres, each of which presents a reflection to the eye from some part of its surface; and as there may be tens of thousands of these in a very small space, the effects become united, and are recognised as a whiteness. It is simply an aggregation of small effects to produce one more conspicuous. If the bubbles are large, then fewer of them can be contained in a given area; consequently the number of convex reflecting surfaces is smaller, and the united effect less brilliant—in other words, less white.

But it may still be asked by some of us, how is it that the froth of a *reddish* liquid, such as beer, is white? The phenomena of reflected light must again be appealed to for the means of solving this problem. The colour of a liquid (not its froth) is determined by the transmitted light, not the reflected. If liquor be contained in a transparent glass vessel held between the eye and the light, and we look *through* it, the eye receives the light transmitted by the liquid, and deems the colour of that light to be the colour of the liquid itself; but if we pour the liquor into an open vessel, and look *obliquely* at the surface, we shall find that the colour does not deviate much from whiteness, whatever the transmitted colour may be. The liquid, whatever be its body colour, is when agitated broken up into detached portions at its surface by the formation of bubbles, and each bubble reflects to the eye a portion of the light which falls upon it. Consequently, if this reflected light is nearly white in all cases, the resulting assemblage of bubbles, generally known as froth, must always appear white or nearly white. We can easily understand the greater yellowness of the froth on strong Dublin stout than that on pale Burton ale; the more tenacious liquor forms a thicker and consequently less clearly reflecting bubble than that on the more limpid.

A CITY WEED.

I PASSED a graveyard in a London street,
Where 'stead of songs of birds, the hoarse sad cries
Of wretched men echoed from morn to night.
Locked were its gates, and rows of iron bars
Fenced in God's Acre from tired wanderers' feet.
All broken lay the slabs which love had raised;
But on a mound where fell a patch of light,
A bindweed grew; and on its flowers, with eyes
O'erflowing with a wintry rain of tears,
A pale-faced, miserable woman gazed,
Heart-sick with longings for the nevermore,
And faint with memories of bygone years:
A breezy common with a heaven of stars,
And lovers parting at a cottage door.

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A CORNISH HAVEN.

COME away with me to the sea! Let us go to Cornwall, where sea and air are of the purest and most exhilarating. Jumping into the train and proceeding westward until we come to Launceston, there we will leave the little quiet old-world town behind. So anxious are we to get to the sea, that we will not even stop to climb the hill and inspect the old castle which frowns down on us; but we will mount to the box-seat of the three-horse coach which stands waiting at the station, and drive away—still westward. Away, over the breezy uplands, where the cattle chew the cud sleepily beneath the August sun, between hedges set with brilliant jewels, which we call flowers, past undulating downs in whose hollows the purple shadows lie dreaming.

We stop presently at a little roadside inn, to give the horses a rest and a feed; and I climb down from my elevated position and partake of a cup of tea in the inn kitchen—a primitive flagged kitchen, with a great high-backed wooden settle by the fire, and pewter bowls and cups shining on the walls. They pour out my bohea from a teapot which a fancier of old china would pronounce to be priceless. Genuine old 'Plymouth' it is, I see, and ask if they would be willing to part with it. But no; 'It was granny's,' and they would rather not sell it; so I turn my covetous eyes away, and clamber back to my seat beside the coachman.

Off we go again, along a fairly level road. The country is but thinly inhabited, and there are long intervals between the houses. By-and-by we begin to descend a hill, and enter a little sleepy town, where at first sight it seems to me that there are an inn and one or two shops, but no inhabitants. Only at first sight; for as we draw up before the *Hotel* (such is the proud boast I see over the doorway), and the driver descends and walks away to deposit a parcel or two and to gossip awhile with his acquaintances, we are delivered over to the tender mercies of the whole juvenile population, who surround the coach, climb on to the wheels, and make audible com-

ments in very broad vernacular on our personal appearance and on our apparel.

This time we move off slowly, for we have a very steep hill to encounter, and the tired horses plod somewhat wearily up it. As we reach the top, and they stop panting to rest, I see far away on the horizon a silver streak, and my heart gives a throb of delight; for I have in its intensest form all an islander's love for the ocean, and I know what that silver streak is on which the sun shines so gaily. On rolls the coach merrily; the horses sniff the air, and seem to know that they are nearing home. Yes; here are the breezes we have come to look for. They peer familiarly under my hat; they blow my veil aside, and rudely kiss my cheeks; and their breath is fresh and salt, and whispers of new strength to the tired mind and body. On we hurry towards the setting sun, who is now mounting the chariot in which he drives away to the other side of the world. We have lost sight of the faint line of silver again, and our view is almost bounded by the dusky hedges. Presently we turn a corner abruptly, and there, apparently at our feet, lies the blue Atlantic, smiling bright welcoming smiles at us in the last rays of departing Sol. The active young breezes, which seem so glad to see us again, revive us with sweet aromatic odours, which they gather from the weed-strewn rocks. They evidently think we are wise people to have left those weak-minded little zephyrs coquetting with the flowers on the lawn at home, and to have followed them to their sporting place beside the restless ever-changing sea.

In another moment we stop, and all the tired travellers dismount and stretch their cramped limbs. I hear many around me inquiring for hotels or lodgings; but we are expected, and here is our landlady's husband come to meet us; so we hand over our luggage to him, and wend our way to Cliff Cottage. Here we find a smiling hostess, who tells us how glad she is to see us; and after we have removed some of the dust of our journey, we sit down to a well-spread tea-table, on which a noble Cornish pasty holds the post of honour. We

draw the table into the bow-window, which faces not directly seawards, but towards the bay, which has been a haven of safety to so many. But it is growing dark already, and we are weary with our long drive; so, soon we seek our fragrant chamber, in which the lavender scents struggle faintly to overpower the pungent aroma of the sea; and it is not long before we are lulled to sleep by the monotonous thunder of the waves on the rocks below.

In the morning we peep out at the colliers which ride safely in the little sunny bay, at the white houses which are dotted here and there over the cliffs, and at the little village itself lying snugly in the hollow. To right and left, sweeping far away, stand the great eternal sea-walls of sombre iron-stone crags, and the grassy downs rolling away inland, unbroken except by a lonely stone or a patch of golden gorse; and beneath us lie ancient gray boulders and stretches of yellow sand. Away on the hill opposite stands the little church, in whose quiet graveyard rests many a sailor who has found his death in the pitiless sea. Eleven graves mark the resting-place of the crew of one vessel, whose figure-head forms an appropriate headstone to the sad group.

The first thing to be done after breakfast is to bathe. It is not enough to be *by* the sea; we must be *in* it, if we wish to rob it of all the strength and vigour we can; so we start off over the downs to where a sudden depression in the cliff leads to the bathing beach. Here we find old Harriet the bathing-woman, browner than ever, who gives us a cordial welcome. The bathing is primitive in the extreme. Harriet possesses two tents, which she pitches daily on a smooth spot of sand. For the use of one in which to disrobe you pay a ridiculously small sum, which also includes old Harriet's watchful 'surveillance' while you are in the water. As the number of tents is so limited and the bathers many, not a few avail themselves of the shelter of a friendly rock behind which to perform their toilet; but I am squeamish, and wait my turn for the tent. And oh! how reviving the plunge into the surf, which comes rolling in frothing and seething like champagne, and which knocks me over and plays at ball with me as if I were a cork! The cool waves curl and cling round me, and kiss my arms and hands lovingly with their wet lips. I let them break over my bowed head, and clasp them tenderly to my breast; but they slip away from me, and riot and tumble round me with joyous laughter, sprinkling eternal freshness from their bounteous hands. I sniff the keen salt air with delight, and let the foam toss me to and fro at its own sweet will, until Harriet, who watches me anxiously (she thinks me a somewhat rash young person, I know), orders me authoritatively to come in, saying I have had enough of it—for the first time. Very reluctantly I obey; but it would require a braver person than I am to contradict the withered old sea-nymph, and soon I emerge

from the tent with streaming locks, feeling like a giant refreshed.

Thank goodness, here are no brass bands, no esplanade; a circulating library of such modest pretensions that it does not circulate, and shops in which it is next to impossible to spend any money! At the chemist's we buy our groceries as well as our drugs, and he is the only wine-merchant the dear primitive little place can boast. But we get mutton which transcends Southdown; capital poultry and vegetables; butter such as of have never tasted before or since; rich cream, which you must call Cornish (not Devonshire), to please the buxom farmer's wife who supplies it to you; and plenty of good fruit. And what if you want more, with such a sky above you, such a glorious sea at your feet, such a wall of ironstone crags behind you? Down on the beach we go, and dawdle away the hot summer afternoon. We stretch ourselves on the tawny sand, where great barriers of rock jut out on each side of us, beneath the shadow of a dreadful scarped cliff, to which no scrap of weed or herbage seems able to cling. We look up at it with a sense of awe. We think of the many ships, nearing home after a weary journey, which have been driven by the storm's pitiless whip straight into its terrible arms, there to meet a dread destruction. We think of the many struggling drowning wretches on whom it has gazed down with its stony eyes during all the ages it has stood there. The great billows in their winter's fury have beaten and lashed it until it is scarred all over; but still it gazes calmly down at them, as if defying their malicious rage. And yet, cruel as it is, how picturesque the colouring as it ranges from the intense purple black of the tide-line, through warm green and brown shadows, to the bright high lights far away above our heads.

Dark rock-pools lie behind us, lined with queer zoophytes and delicate sea-anemones; beside us are the crimson lady's finger and the golden trefail; the dainty scents of the sea-weed and the fresh wet sand are in the air, and before us is the smiling sea. Yes; he smiles at us to-day, though here—with a restless surf breaking eternally on the beach—he is never calm and rippling, as we see him in more southern climes.

Presently the sun sinks lower in the heavens; a breeze awakes, and the day turns cooler; so we go for a walk along the smooth firm sand, which the ebbing sea has left bare; through a wilderness of weird black cliffs, which, when the tide is high, range far out into the sea in castles and turrets and spires of jagged rock; an iron-bound coast indeed, hopeless to the shipwrecked mariner, save for our friendly little haven. Far away on the warm horizon hangs Lundy Island, like a shapely gray ghost; very faint by day, and at night telling us only by its revolving light where it is. We walk on to a gorge up which we can make our way to the top of the cliff, and homeward over the undulating downs and by the banks of golden broom. We pass through a little village, where the myrtles and fuchsias are all about in the cottage-gardens, and where the great yews brood silently over the old gray church. The door stands open, and we go in. What a dear old church, with its quaintly carved oaken pews

and tender-hued stained glass windows! Evidently the restoration-fiend has not reached here yet. Let us hope that he will stay away, along with the esplanade and the brass bands.

Sometimes we spend our afternoon or evening out at the end of the breakwater, which forms one side of this little mariner's refuge. It connects a rock which stands right out at sea, with the shore, and occasionally in spring-tides is quite under water. One evening, while standing on the far end watching the glorious setting sun, we forget to look behind us, and turning suddenly, find the breakwater submerged. A man could still cross it perhaps, but a not over-strong woman might easily be carried over and drowned by the on-coming surf. I am not brave enough to face it; so we remain where we are, and enter into conversation with a stalwart Cornishman, who, with the instinct of a true gentleman, volunteers—as the lady seems nervous, and as he knows all about the tides, and exactly how high the sea will rise to-night—to remain with us until we are released by the ebbing waters. I rather resent the imputation of timidity, but am very glad he has imprisoned himself with us, as the night turns darker and darker, and the waves creep higher and higher, and wheel and foam and thunder around, as if in impotent rage at their inability to reach their prey.

Our Cornish hero reassures and consoles me, telling me that they cannot possibly reach to where we sit; and he whiles away the time with stories of wrecks which he has seen, and also of many hair-breadth escapes. He tells us how a ship driving straight on to the cruel rocks, was lifted by one giant wave over the breakwater and landed safely in the harbour beyond; and I steal a glance behind me, and see with thankfulness that the waters are abating. In a little while longer, with the help of our pleasant companion, I am able to get over dry-shod, and it is with a feeling of relief that I find myself once more on mainland.

From this breakwater too, on a stormy day we watch the life-boat go out for practice. How gallantly she breasts the breakers, which seize her and whirl her backwards, as if defying her to leave the shore. The seamen tell us that in the great storms which arise here during the winter she is perfectly useless. No life-boat could live in the seas which beat upon this heartless coast. Often the coast-guardmen have to creep on hands and knees to their signal-station, as standing erect they cannot face the wind. But the rocket apparatus has saved many and many a life; and we also one night see that fiery messenger of life and hope speed away into the darkness over an imaginary wreck; and a fictitious shipwrecked mariner comes on shore in the frail-looking apparatus, which slides along the rope, swaying to and fro in the angry wind, looking like a frail thread, suspended as it is in mid-air over the vexed and tumbling waters below.

Sometimes we make excursions—to Tintagel Castle, where King Arthur dwelt with his knights; or away to wooded Clovelly, where Will Carey lived, and Amyas Leigh suffered, and Rose Salterne loved. Or to Stratton, in the neighbourhood of which a great battle was fought, in 1643, between the Parliamentary and Royalist troops, in which the former, under Waller, were

defeated. A cannon found on the field marks the site of the combat; and in the High Street of the town, a slab let into the wall of an old house bears a legend telling how Sir Bevil Grenvill, the victorious general, rested there after the fight.

But we like best to spend our days wandering over the sands and the ancient mussel-clad boulders, or straying across the breezy downs into the rich smiling corn-country beyond, where, in the hedges the pale wild roses are transmuting themselves into brilliant scarlet hips, and the sun is beginning to dye the blackberries a luscious purple. Then as the day begins to tire, and prepares to go in royal state to her rest, we love to sit out on the rocks listening to the weary surges which sing her a sweet monotonous requiem, and watching the scarlet flames in the west steeping the wet sands in a crimson stain as of blood. A great belt of iron-gray clouds encircles the horizon. Slowly the sun sinks behind it, gilding its edges with a rich luminous glow, which faintly shadows forth the glories the clouds veil from our eyes. Lower and lower he droops his head, heavier and still heavier with sleep, until one brilliant flaming eye is all that we can see. Then the lid drops over that too, and he is gone. Spell-bound, we sit on, listening to the sea's mournful dirges, while night swoops down over earth and ocean with dusky wings. We watch the moon, like a vain lady attiring herself magnificently in the east before she issues forth on her evening pilgrimage. She sends her handmaidens, the stars, before her, and they light up her pathway with their brilliant lamps. Then she comes forth robed in a filmy veil of pearly lace, and mounts silently into the sky, until she sits enthroned far above our heads. She kisses the white crests of the waves, and crowns them with silver, and peers with gentle eyes at the solemn gigantic black cliffs, until they seem to lay aside something of their stony harshness in the light of those poetic orbs. The long ear-weeds waving in the water seem to beckon to her with inky fingers, and a few giddy young stars obey the summons, for some of them have fallen into the quiet rock-pools, and gaze up at us out of their calm depths. The phosphorus awakes and shoots out tongues of lambent flame, as if seeking to outvie the splendour of the queen of night. The waters glow as if they were on fire, and the great dark billows rush in and cast sparkling jewels at our feet.

How shall we resolve to leave all these delights? Wild ocean is so kind to those who love him and do him homage. He gives them back the strength of which the struggle and turmoil of the world have robbed them, and refreshes the weary spirit with his gracious sights and sounds. Nature is no step-mother, and for those who look at her most tenderly and love her best, she paints her fairest pictures and sings her sweetest songs.

But soon, too soon, the day comes when we must bid good-bye to the kindly folks we have grown to love so well; when we rest for the last time in our sea-odoured chamber; when we take our last walk over the downs, and loiter for the last time beneath the shadow of the time-worn cliffs. We leave the dear quiet little place, where we have for a time hidden from the busy world, and rested on our march; we leave it to the winds, which grow ruder and more boisterous day by day, and which soon will drive many a mariner to take

refuge in its friendly haven. We shall find our own little zephyrs at home quite grown up, and strong enough to give us many a blow during the winter.

But if there be any who, like me, would love to linger on its quiet beach, to make acquaintance with its giant wall of rocks, to drink its keen life-giving breezes, to watch its gorgeous sunsets, or dream beneath its silver stars—then, let them take coach at Launceston, and following the declining sun, drive westward away to—Budehaven.

THE LAST OF THE HADDONS.

CHAPTER XXXIII.—‘A WOMAN’S ERRAND.’

AFTER making two or three attempts to obtain a private interview with me, and finding that it was not to be, Philip did not stay very long, explaining that he had only come down for the papers, and had business in town for the remainder of the day. Somewhat more gravely and quietly than usual, he shook hands with Mrs Tipper and Lillian; and then, in a matter-of-course way, said: ‘Come, Mary.’

I knew that I must not refuse. Murmuring an excuse for a moment, I ran up to my room and fell upon my knees, asking for the strength I so sorely needed for the coming trial; then joined him again, and we went out together. As we walked down the lane, I felt that he too was nerving himself; and presently he asked, in a low grave voice: ‘What made you talk in the way you did just now, Mary?’

I was in a difficult position. If I attempted to justify myself, he would take alarm at once, and bind me and himself still closer to our bond. I could only treat it as a jest.

‘We all talk nonsense sometimes, Philip.’

‘I suppose so; but that is a kind of nonsense you have not taught me to expect from you.’

‘I am afraid you expect too much from me.’

‘I certainly expect a great deal.’

Fortunately, I had something to say which would keep off love-speeches; and without any attempt to smooth the way, I said it.

‘Philip, I want to ask you to give me ten pounds. I have spent all my money.’

Oddly enough, he did not know that I was entirely without money. I had thought it sufficient to tell him only that my dear mother’s income died with her, not wishing to pain him with the knowledge that I had been so nearly destitute. I think he imagined that I had a small income of my own, and as I avoided the subject, did not like to appear curious about it. Even now, I believe that he did not suspect me to be entirely penniless, merely supposing that I had spent all that I had in hand. The five-and-twenty pounds had been expended to the last shilling in furnishing up my modest wardrobe, and for small incidental expenses in the way of my share towards the cottages, &c. I had shrunk from the idea of making him acquainted with the state of my finances; knowing how large-hearted he was, and how much would be forced upon me if he once guessed my need. Mrs Tipper was always protesting against the value and number of the offerings which found their way to the cottage, whilst Lillian and I were afraid of expressing a wish in his presence.

It was all very different now. It would cheer and comfort him by-and-by to reflect that I was able to ask a favour of him just at this crisis. Had I not been so sorely pressed as I was, it would still have been as well to ask him.

‘Ten pounds!’ he ejaculated, stopping short in his walk to gaze at me in the greatest astonishment; asking himself, I think, if *this* was the explanation of the change which he had observed in me. ‘I am utterly ashamed of my stupidity in allowing you to name such a thing; though I am sure you will do me the justice to attribute it solely to want of thought!’

‘You see I do not mind asking you, Philip.’

‘Mind indeed; of course you do not! I will run back at once and write a cheque.’

‘No; please do not—not if you have as much as ten pounds with you. Just now, I want only that.’

‘Ten pounds! Take what I have about me!’ hastily taking out his purse, and putting it into my hand.

‘But indeed I could not take all this!’ I returned, seeing that the purse contained several notes as well as gold. ‘I do not want any more than ten pounds.’

‘Nonsense; don’t make a fuss over such a trifle.’

But I separated two five-pound notes from the rest, and was very decided about his taking back the purse.

‘Then I shall of course send a cheque as soon as I get back. By the way, Mary, I am making arrangements for the settlement of three hundred a year upon you; and of course all is yours, absolutely, in the event of—’

I broke down for a few moments, leaning against the stile where we were standing.

‘Nay, Mary’—Then I think that he saw something more in my face than even the allusion to his death seemed to warrant. He went on with grave anxiety: ‘I fear you are not well. Is your hand painful?’

Ah, my hand—how thankful I was for the suggestion! I slipped it under my cloak, dragged away the bandage, which again opened the wound.

‘Bleeding afresh! You must really have it seen to, Mary.’

‘O no; it is really a very trifling affair.’ In my misery and despair, I almost laughed at the idea of being able to feel any physical pain.

He assisted me to tighten the bandage again. But I presently knew that it would not do to have his hands touching me and his face close to mine in this way; so, with a little brusque remark about his want of skill (ah Philip, had you known what it cost me!), I declared that my hand required no more fussing over. I had the parting to go through, and needed all my nerve. First, I must make sure of his not coming down to the cottage for two or three days.

‘You said you expect to be very much engaged; and therefore I suppose we shall not see you again until the end of the week—Friday or Saturday, perhaps?’

This was Tuesday, and I wanted to make sure of two clear days.

‘I will contrive to run down before that, if you wish it, Mary.’

‘No; I too have much to do. Do not come before Friday.’

‘Very well. You will tell me then which day you have decided upon, since you will not say now.’

I had waived the decision as to which day the wedding was to take place; and I did so again, merely repeating, 'Friday.'

'All right; take care of yourself; and be sure to have the hand seen to.' He was stooping down to give me the customary kiss before crossing the stile; but I took his two hands in mine, and looked up into his face, I think as calmly and steadily as I had prayed for strength to do.

'God bless you, Philip.' Then I put my arms about his neck, lifted up my face to his, and kissed him. 'Good-bye, dear Philip.'

I saw an expression of surprise, a slight doubt and hesitation in his eyes. He had not found me so demonstrative as this before, and was for the moment puzzled to account for it. But I contrived to get up a smile, which, I think satisfied him. Then with a last wrench, I turned away, hearing as though from another world his answering 'Good-bye' as he vaulted the stile.

After that, the rest would be easy. I allowed myself one hour in the woods—not for the indulgence of regret—I knew too well the danger of that—but for recovery, and got back to the cottage in time for our early dinner. Moreover, I forced myself to eat, knowing that I should require all the strength I could get; and delighted dear kind old Mrs Tipper's heart by asking for a glass of wine.

It was a terrible ordeal, sitting there under their tender watchful eyes; but I got through it tolerably I think. Afterwards, I told them that I wanted to catch the three o'clock up-train, adding a purposely indefinite remark about having some arrangements to make in town.

'Is Mr Dallas going to meet you, my dear?' asked Mrs Tipper anxiously.

'No; I am going on a woman's errand,' I replied, with a sad little half-smile at the thought of what their surprise would be if they could know how very literally I was speaking.

'Must you go to-day?—may not I go with you, dear Mary?' pleaded Lillian. 'You are looking so pale and unlike yourself; I do not like the idea of your going alone.'

'I should fancy that there was something really the matter with me, if I could not go alone so short a distance as that, dearie,' I lightly replied. 'I think I will allow my age to protect me.'

She drew nearer to me, looking at me in the nervous, half-fearful way she so frequently did of late, as she laid her hand upon my arm.

'I wish you would not talk like that—dear Mary, why do you?'

I was not strong enough to bear much in this way; so replied with an attempt at a jest, which made her shrink away again. I daresay my jests were flavourless enough, and in strange contrast to my looks.

Mrs Tipper's silent, anxious watchfulness was even harder to bear than Lillian's tender love. It was not my journey to town which puzzled them—I saw that they imagined I was intent upon preparing some little pleasant surprise for them at my wedding—but the change they saw in me, which no amount of diplomacy could hide.

How thankful I was, when I at length made my escape to my own room; but I was not allowed to go alone. I had to bear Lillian's loving attendance whilst I was putting on my bonnet and cloak. Indeed, she lingered by my side until I had got half-way down the lane.

'You will not be very late, Mary?'

'No, dearie; I think not—I hope not.'

'We shall be longing to see you back.'

'And you must not be surprised if I return in a very conceited frame of mind, after being made so much of; I lightly replied.

'Only come back *yourself*,' she murmured, giving me a last kiss as she turned away.

Dear Lillian, did she in truth guess something of what the lightness cost me? I knew that I did not deceive her wholly. Although she might be in some doubt as to the cause, I did not succeed in hiding the effects from her.

I arrived at the London terminus about four o'clock, and took a cab, directing the man to drive to a West-end street facing St James's Park. My errand was to one of the largest mansions there, which at any other time I should have considered it required some nerve to approach in a way so humble. I could quite understand the cabman's hesitating inquiry as to whether I wished to be driven to the principal entrance. Probably I did not appear to him quite up to the standard of the housekeeper's room. Fortunately I was not able to give a thought to my appearance. Had I been visiting the Queen, I should have thought of her only as a fellow-woman, in my deep absorption.

Three hours later I was taken back to the railway station in a luxurious carriage, borne swiftly along by spirited horses; a slight, refined, delicate-looking woman, with earnest thoughtful eyes, and attired almost as simply as myself, was sitting by my side with my hand in hers, as we now and again touched upon the subject which occupied our thoughts.

I had found a friend in my time of need, and such a one as I had not dared to hope for. But this in due time. We parted with just a steady look and grasp of the hand.

'To-morrow!'

'Yes; between six and seven.'

I returned to the cottage, certainly not looking worse than when I had quitted it, and was received with a welcome which made me almost lose courage again. Fortunately it was very nearly our usual time for retiring. Fortunately too I had much to do, and it had to be done in the small-hours of the night, so that I had no time to give to the indulgence of my feelings when I was left alone in my room. First turning out the contents of my drawers and boxes, I separated from them a few things which were absolutely needful for my purpose. One dress and cloak and bonnet were all that I should require, besides a small supply of under-clothing. The latter I put into a small trunk which Becky could easily carry, and then replaced the other things in the drawers again, arranging and ticketing them in orderly methodical fashion as I wished them by-and-by to be distributed. If 'Tom' should in course of time prove more appreciative of Becky—which in consequence of a hint I had received from Lydia, I did not despair of so much as she did—I pleased myself with the idea that the contents of certain drawers would make a very respectable outfit for her. The plain gray silk dress which I had purchased for my own wedding would not be too fine for hers. In a note placed on the top of the things, I begged Mrs Tipper to give them to Becky when the right time came. Afterwards I took out the little collection of my dear mother's jewellery.

It was really a much better one than I had believed it to be. Indeed I had never before examined the contents of the packet. When it appeared probable that the jewels would have to be sold, I had avoided looking at them; shrinking painfully from the idea of calculating upon the money value of my mother's only legacy to me; and perhaps also in my time of need a little afraid of being tempted by the knowledge of its worth. One diamond ring, a large single stone, which even I could tell was of some value, I put on the finger of my left hand, which would never wear another now. That was all I would keep. I then put aside a pretty ruby brooch for my dear old friend Mrs Tipper; and after some hesitation about making a little offering to Philip, I satisfied myself with selecting a valuable antique ring which had belonged to my father, and writing a line begging Lillian to give it to him with the love of his sister Mary. The rest—I was quite proud of the quantity now—I packed up and addressed to the care of Mrs Tipper—my gift to my dear Lillian on her wedding-day.

SUBMARINE CABLES.

WORKING.

THE working and maintenance of the existing telegraph lines employ a vast number of people taken all together; but it is surprising how few hands are necessary for the working of any single line or system. This is especially so in the case of submarine cables, where, when the cable continues sound, it is not necessary to support a staff for surveillance and repairs. Half-a-dozen stations several hundred miles apart, and half-a-dozen men at each, are sufficient to carry the news from one end of a continent to the other.

Without enumerating the telegraph systems that now exist, it may suffice to say that the British Isles are connected by submarine cables with nearly every quarter of the globe, and that their number is still increasing.

A telegraph station abroad, no matter in what Company or country, presents nearly the same characteristics wherever found. The more remote the place, the more primitive may be the arrangements; but the work is the same, the men are about the same, and the instruments almost invariably so. There is the superintendent; and under him the clerk in charge, his right-hand man, who oversees the clerks or operators at their work of sending and receiving messages. Then, besides these, and partly independent of them, there is the electrician, a member of the scientific as distinguished from the operating staff of the Company, whose duties are to take periodical tests of the cable and land-lines, to report on their condition, and to keep the instruments in proper working order. Under all these, there is generally the messenger and battery-man, who may be called the stoker of the electrical engine, and who, besides, does the odd work of the establishment.

The station itself generally consists of the superintendent's office or bureau; the instrument-room, where the messages are sent and received; the battery-room, generally under ground; and the sleeping-quarters of the clerks. Occasionally the electrician and clerk in charge have separate working-rooms; and a smoking-room, with perhaps a

billiard-table and home newspapers, are added for the convenience of all. Life passes quietly and uneventfully at these stations, except when something goes wrong with the instruments or the cable, and then the electrician has his period of anxiety and trouble; while the operators, on the other hand, find their occupation at a temporary standstill.

To understand the working of a submarine cable and the actual process of sending a message, it is necessary to figure in imagination the several parts of the electric circuit, made up of the battery, the instruments, the cable, and the earth itself; and to remember that for a current of electricity to flow through any part of the circuit it is necessary that the whole circuit should be complete. Starting then from the battery, which is the source of the electric current, we have the cable joined to it by means of a key or sending instrument, which by the working of a short up-and-down lever can connect or disconnect the conductor of the cable to a particular pole of the battery, the other pole of the battery being the while connected to the earth. The cable then takes us to the distant station. Here the conductor is connected to the receiving instrument, or instrument for making the signals indicating the message, and through the receiving instrument it is connected to the earth. The electric circuit is thus rendered complete. The current passes from one pole of the battery by means of the key into the cable, through the cable to the instrument at the other end, and thence to the earth; and inasmuch as the other pole of the battery is at the same time connected to the earth at the first station, the conducting circuit is complete, for the earth, no matter what the intervening distance be, acts as an indispensable part of the circuit.

We have thus the two stations connected by a cable. At the station sending the message there is the battery, from which the current proceeds; the sending instrument, for letting the current into the cable, or stopping it; and the 'earth-plate,' or metal connection between one pole of the battery and the earth. At the station receiving the message there is the receiving instrument, and again the earth-plate, connecting the earth into circuit. These separate parts of the circuit, as we have already said, must be 'connected up,' as it is termed, so as to provide a complete conducting channel for the current to flow in from one pole of the battery to the distant place and back again (or virtually so) through the earth. Only at one place can the circuit be interrupted and the current consequently stopped—that is, at the key of the sending instrument. Here then the sending clerk sits, and by manipulating the lever of this key he 'makes and breaks' the circuit at will, and thereby controls the current. The regulated making and breaking of this connection is the basis of telegraphing, whether by submarine cable or by the ordinary land lines. Accordingly as the clerk maintains the circuit for a longer or a shorter time, so will the current give longer or shorter indications on the receiving instrument at the distant station: or again, according as the opposite poles of the battery are applied to the cable by the key, and the direction of the current consequently reversed in the cable, so will the indicated signals on the

receiving instrument be of opposite kind. From the elementary short and long signals, or right and left signals, so obtained on the receiving instrument, a code of letters and words may be built up, and intelligible messages transmitted. The Morse Code is that universally adopted, and for the further information of our readers we here append it as it is usually written :

Letter.	Sign.	Letter.	Sign.
A.....	— · —	P.....	— — —
B.....	— · — · —	Q.....	— — — · —
C.....	— · — — —	R.....	— · — —
D.....	— · — —	S.....	— — — —
E.....	—	T.....	— — —
F.....	— · — · — · —	U.....	— — — —
G.....	— — — · —	V.....	— — — · —
H.....	— — — —	W.....	— — — —
I.....	— — —	X.....	— — — —
J.....	— — — —	Y.....	— — — —
K.....	— — — —	Z.....	— — — —
L.....	— — — —	Ch.....	— — — —
M.....	— — — —	ε (accented)	— — — —
N.....	— — — —	Understand	— — — —
O.....	— — — —	Wait.....	— — — —

The numerals run :

Numeral.	Sign.	Numeral.	Sign.
1.....	— · —	6.....	— — — —
2.....	— · — · —	7.....	— — — —
3.....	— · — — —	8.....	— — — —
4.....	— · — — —	9.....	— — — —
5.....	— · — — —	0.....	— — — —

For other accented letters, fraction signs, punctuation, and official directions as to the disposal of the message, there are other signs, but the above are the essentials of the Morse Code. The long and short signs represent the long and short signals of the receiving instrument, produced by the long and short contacts of the sending key with the battery. It will be seen that the letter A is rendered by a short signal followed by a long one; the letter B by a long signal followed by three separate short ones; and so on. Hence, in order to telegraph the letter A to his colleague at the distant end of the line, the clerk, by depressing the lever of the sending instrument, makes contact between the cable and the battery, first for a short time, and then for a longer time. The long and short signals are widely employed in overland telegraphy; but in submarine telegraphy a saving of time is effected by signals of *opposite kind*. Thus, if a left deflection, or deflection of the indicator to the left, signifies a 'dot' or short signal, a deflection to the right will signify a 'dash' or long signal. In this case the sending instrument or key has two levers, a right and left one, corresponding to the distinct signal which each produces. By depressing the left lever of the key, a pole of the battery is applied to the cable, which produces a left-hand signal on the receiving instrument at the distant station; and by depressing the right-hand lever, a right-hand signal is produced. Proper rests or intervals are permitted between the separate words, letters, and full stops of a message.

The battery in common use for submarine telegraphy is either the sawdust Daniell or the Leclanché. The Daniell consists of a plate of zinc and a plate of copper brought into contact with each other by sawdust saturated with a solution of sulphate of zinc; and crystals of sulphate of copper (bluestone) are packed

round the copper plate, so as to dissolve there in the solution of sulphate of zinc. The zinc plate forms the *negative* pole of the battery, and the copper plate the *positive* pole. When these two poles are connected together by a wire or other conducting circuit, such as that made up of the cable and the earth, a current of electricity—the voltaic current—flows from one to the other, and always in one direction, namely, from the copper or positive pole to the zinc or negative pole. Hence it is that by applying the one pole or other to the cable and the other to earth through the earth-plate, the direction of the current in the cable is reversed and opposite signals produced.

The earth-plate is usually a copper plate several feet square, sunk deep into the moist subsoil near the station, so as to make a good conducting contact with the mass of the earth.

The receiving instruments for working a submarine cable are different from those used in working land-lines. Inasmuch as the current travels full strength, like a bullet, through a land-line, and in the form of an undulation or wave through a cable, so is it necessary to have different kinds of receiving instruments for each. In a land-line powerful currents can be used with impunity, and these can be made, by means of electro-magnetism, to move comparatively heavy pieces of mechanism in giving signals. But in a cable the currents are prudently kept as low as possible, in case of damage to the insulator, and the receiving instrument must therefore be delicate. In land-lines the current passes in an instant, leaving the line clear for the next signal, so that the indications of the receiving instrument are abrupt and decided. But in a cable the electric current takes an appreciable time to flow from end to end, so that the separate signals in part coalesce, the beginning of one blending with the end of that preceding it, so that the signals become involved with each other. It is necessary, therefore, that time be allowed for each wave to clear itself of the cable before another wave is sent in, otherwise we would have the cable as it were *choked* with the message. A continuous current of electricity may be said to be flowing through it, and the ripples on the surface are the separate signals of the message. It is to take cognisance of these waves or ripples that the receiving instrument for cable-work must be designed; and as the quicker the message is sent into the cable the smaller these ripples will be, the more delicate should be the instrument.

There are only two instruments in use on long cables, and both are the invention of Sir William Thomson, the distinguished Glasgow physicist and electrician. The mirror galvanometer has been already described in this *Journal* in a paper on the manufacture of submarine cables; and the 'mirror' or 'speaker,' the commonest of these receiving instruments, is but a modified form of the mirror galvanometer. It consists of a hollow coil of silk-covered wire, in the heart of which a tiny mirror, with several small magnets cemented to its back, is suspended by a single thread of floss-silk fibre. A beam of light from a lamp is thrown upon the mirror, and reflected from it on to a white screen, across which a vertical zero-line is drawn. When no current is passing through the coil, the reflected beam of

light which makes an illuminated spot or gleam on the screen, remains steady at the zero-line. But when a current passes through the coil, the magnets in its heart are moved and the mirror with them, so that the beam of light is thrown off at a different angle, and the spot of light is seen to move from the zero-line along the screen to right or to left of the zero-line according as the current is made or reversed in the coil; so that as the key is manipulated at the sending station, so are right or left signals received by the clerk who sits watching the movements of this spot of light, and interpreting them to his fellow-clerk, who writes them down. In the form of instrument here described, and also in the other receiving instrument for submarine work, the zero is not fixed but movable. The vertical line on the screen is only the nominal zero. The continuous current underlying the ripples which form the message, deflects the spot from the zero-line; but this slow deflection can be disregarded by the clerk, for over and above it there are smaller quicker movements of the spot to right and left corresponding to the ripples, and these are the proper signals of the message. It requires long practice to make a good 'mirror' clerk, one who can follow the gleam with his eye through all its quick and intricate motions, and distinguish between those due to the shifting zero and those due to the various signals sent. Even this compound-ripple difficulty, however, is now got rid of by the use of an apparatus called a 'condenser,' the effects of which are that continuous currents are neutralised, and the pulsations of the signals sent are *alone* seen in the movements of the light upon the scale.

The other instrument is the siphon recorder, which permanently records in ink the signals which the 'mirror' only shews transiently. The principle of the siphon recorder is the converse of that of the mirror. In the mirror there is a large fixed coil and a light suspended magnet. In the siphon recorder there is a large fixed magnet and a light suspended coil. When the current passes through this coil, the latter moves much in the same way as the magnet moves in the 'mirror;' that is, it rocks to right or left according as the current flows. This rocking motion is communicated, by a system of levers and fibres, to a very fine glass capillary siphon, which dips into an ink-bottle and draws off ink upon a strip of running paper. The ink is highly electrified, so as to rush through the siphon and out upon the paper, marking a fine line upon it as it runs. When no current passes in the coil, this zero-line is straight; but when currents are passing, the line becomes zigzag and wavy; and the right and left waves across the paper constitute the message. Both of these instruments are very beautiful and ingenious applications of well-known electric, optical, and mechanical principles. The great merit of the recorder is that if a false signal is accidentally made by the sending clerk, the whole word need not always be lost by the receiving clerk, but may be made out from the rest of the word written down. Thus much repetition of messages is saved. There is some advantage too in having a written message for purposes of after reference.

A singularly ingenious system of telegraphy, termed the *duplex*, has recently been extended to long submarine cables, and is likely to become of

general, if not universal application. It is effected by constructing an artificial line, in this case representing an artificial cable, which shall have the same influences on the current that the actual cable has. The signalling current from the battery is then split up at each station between the actual cable and the artificial cable, so that half flows into one and half into the other. And there is placed a receiving instrument in such a way between these two halves of the current that they exactly counterbalance each other's effect upon it; and so long as sending is going on from a station, the receiving instrument at that station is undisturbed. But the sending currents from the other station have the power to disturb this balance and cause signals to be made. Thus then, while the sending at a station does not affect the receiving instrument in connection with the cable there, the currents sent from the distant station cause it to mark the signals. Each station is thus enabled to send a message and receive one at the same time; and this is what is called duplex or double telegraphy.

In ordinary telegraphy, one station is receiving while the other is sending; but in duplex working, both stations are sending together and receiving together, so that there is little or no delay in the traffic, and the carrying power of a busy cable is practically doubled.

In case of accident to the cables each Company maintains a repairing-ship ready to go to sea at shortest notice. Some 'faults' are of a nature not seriously to interfere with the working of a cable; but it cannot be expected that they will remain always in the same comparatively harmless state. When a flaw occurs in the insulator it tends to enlarge itself, and more of the current escapes to the sea, until so much escapes that the current which reaches the distant station is too feeble to work the instruments there. All traffic therefore ceases. The electrician's tests having localised the fault so many miles from shore, the repairing-ship proceeds to the spot. Here she lowers her grapnel a mile or two on one side or other of the supposed line of the cable, and when enough rope has been let out, she steers very slowly under steam, or drifts with the tide across the cable's track. The grapnel is simply a great iron hook, one approved form being like a compound fish-hook, with five or six flukes starting from the shank. A weight of chain drags behind it, to keep it well down on the bottom. The rope, which is generally of wire and yarn, passes under a dynamometer, which indicates its tension, and thence to the steam winch used for hauling in. Often the grapnel catches in rocks, or mud, and gives rise to false hope of the cable having been found. The ship is brought to, and hauling in commences; but soon the obstruction 'gives,' or the grapnel itself breaks, and the true nature of the 'catch' is found out. When the cable is hooked, the greatest skill and care are needed, especially when the ship's head lifts with the waves, to bring up the bight carefully without breaking the cable. When brought to the surface the cable is cut, and each end is brought on board in turn and tested. The fault, as we have previously shewn with the paying-out ship, may prove to be but a few miles distant. The sound end is thereupon buoyed, and the ship proceeds to pick up or haul in the faulty end until it is

thought the fault must have been picked up. The electrician then cuts off the piece which contains the fault, and then he has only to join on a sound piece of cable in its place, and lay it back to the end that was buoyed, so filling up the gap. But if it should *not* contain the fault, the tests are again applied, until finally the fault is detected and cut out. Repairing is arduous and trying work; now giving rise to hopes, now crushing them, and anon deferring them. A great responsibility rests on those who undertake them, as the gain or loss of a week or two may represent an enormous sum of money to the Company.

CROSS-PURPOSES.

IN TWO CHAPTERS.—CHAPTER II.

HAD Cissy only known it, there was very little in Frank Halkett's words to cause her any uneasiness. On his entering the drawing-room, seeing his place by Cissy's side forestalled by the major, whose person intercepted the beaming smile of welcome she bestowed upon him, he had turned away and thrown himself into the low chair that stood by Mrs Leyton's cosy lounge.

'So you have taken refuge with me,' says that lady with a quiet smile.

'Refuge!' repeats Halkett with an innocently puzzled air. 'No; I have only taken a seat.'

'What's the matter with you, Frank?'

'Nothing. Why? Do I look dyspeptic?'

'You don't look pleasant, certainly, if that has anything to do with it. Come; I am a witch, you know,' says Mrs Leyton, 'and so can tell all your secrets. And just to prove my power, I will tell you something now—you are sulky this evening.'

'Meaning I am stupid, I suppose,' says Halkett; 'but it don't take much witchery to discover that. I have an awful headache.'

'Oh, but I have not half done yet,' exclaims Mrs Leyton. 'Shall I go on? I could tell something very important, but that I am afraid of your heavy displeasure. Will you promise not to be angry?'

'Angry with you! Was I ever that?' asks Halkett tenderly. 'I give you full liberty to say anything on earth you like to me.'

'Do you mean that?'

'Certainly I mean it.'

'Very good then,' says the widow with lazy triumph; 'I will continue my sorceries; and first—you are in love.'

'In love!' reiterates Halkett, forcing himself heroically to meet her laughing eyes, and reddening very much in the attempt. 'No, no; your witchcraft has played you false this time.'

'It has not. I persist in my declaration. You are in love—hopelessly, irretrievably, desperately in love.'

'Well, perhaps I am,' says Frank, with tranquil resignation. 'Is that strange? Could one be with you, Frances, for so long a time, and not?'

'Nonsense!' interrupts Mrs Leyton. 'Do not trouble yourself to complete that sentence. We are much too old friends for that, I take it. And now, Frank, be a good boy; emulate your name, tell me all about it.'

'I really don't know that there is anything much to tell,' says Halkett, smiling. 'But what there is you shall hear. I admire a certain young lady

more than is good for me; I fancy, until to-day, she returns my regard. I discover a couple of hours ago that my vanity has misled me. I see her happy in the arms—no, in the society of another—I find myself nowhere, hence my dyspepsia, distraction, and despair.—Don't look so sympathetic, Frances; probably I shall get over it.'

Though he says this with a laughing face, Mrs Leyton's dark eyes can see for themselves he is tremendously hard hit.

'And what is her name?' she asks sweetly.

'O Frances! You laying claim to be a witch, and must even ask that question? I decline to answer it. Your fairy lore should enable you to find out that much for yourself.'

'I love my love with a C because she is candid; I hate her with a C because she is capricious,' says Mrs Leyton archly. 'Am I "warm" or will you still cry "cold"? If you do the latter, I doubt you will be wronging your conscience. Ah, Frank, I think I am one too many for you!'

'You were always that. What one man is equal to any woman? Well, as you have guessed so far, I believe I may as well tell you the rest; and forthwith he commences to pour forth a tale, the telling of which had caused Cissy such exquisite anguish.

When he has finished, Mrs Leyton says: 'If you will take my advice, you will seek the first opportunity that offers, and ask for an explanation of her coldness.'

'You really think that the best thing to do?' says Halkett, brightening. 'I will act upon your advice then, and try my chance. Now let us forget it for the present. Is that a new ring upon your finger? May I look at it? Does it mark a fresh adorer?'

'No; an old one. Geoffrey Hyde gave it to me last autumn.' She surrenders her hand to him as she speaks; and he bending over it, examines leisurely the cluster of brilliants that scintillate and flash beneath the lamp-light.

'He has been faithful to you for a long time,' says Halkett presently.

'Yes; he is very tormenting. I really believe I shall have to marry him in the long-run, if only to get him out of the way.' She reddens a little as she says this, and laughs rather nervously.

'Are you serious?' asks Halkett with surprise. 'Then you are going to make him a happy man after all!'

'That remains to be proved. Probably I shall make him a wholesome warning to all obstinate men. But I think when last I saw him I made him some foolish promise about marrying him in the spring.'

'I congratulate him with all my heart, and you too,' says Halkett cordially. 'I think he is the only man I know quite worthy of you.'

When the hour comes for bedroom candles to be adjusted, Halkett seizes one, lights it, and carries it solemnly to Miss Mordaunt. But quick as he has been, Major Blake reaches her side similarly armed, almost at the same moment.

'Which shall I take?' says Miss Cissy gaily. 'I suppose I can have my choice. I think this pleases me most; and she holds out her hand towards Blake with a pretty smile. 'Thank you,' she continues, slipping her slender fingers into his brown palm; and good-night. Don't smoke too much; and with a little provoking backward nod

she trips away, without bestowing so much as one poor glance upon Halkett. And so ends his first attempt at an explanation, leaving him so indignant that he almost vows he will not seek another.

All the following day Miss Mordaunt studiously avoids him, giving him no chance of obtaining the tête-à-tête she sees is impending. But Halkett calmly bides his time, knowing it cannot be far distant. As daylight fades, he feels more than ever determined to bring her to book before the dawn of another morning; and in this instance at least the Fates favour him, as there is to be a large dancing-party at the Hall to-night. She cannot well refuse to give him one dance out of the many—such palpable avoidance would be rather too marked; and once he has secured her as his partner, she must be at his mercy until the dance comes to an end.

This idea of course has also occurred to Miss Mordaunt, and though dreading the interview, she is still sufficiently indignant to cause her to make up her mind to be as curt and outspoken on the occasion as will be in strict keeping with her dignity. In this frame of mind she goes up-stairs to dress, and being an Irishwoman, it cannot be altogether said but that she sustains a rather pleasurable sensation—albeit one largely mingled with something very much akin to nervousness—as the battle-hour draws nigh.

'What shall I wear, Kennedy?' she asks her maid, sinking languidly into a chair.

'Well, miss, you know you look well in anything,' says Kennedy obligingly; 'there is nothing but what becomes you; but if I might be allowed to suggest, you look lovely entirely in white.'

'I won't wear white; I hate it,' says her mistress pettishly. 'Débutantes, and brides, and corpses wear white; I think—I shall wear—black to-night.'

'Black? O Miss Mordaunt!'

'Yes; certainly. Is gay clothing so necessary to me, then?'

'Well, miss, there's no doubt but you look real handsome in black; but the other ladies—they will be so gay—and you!—'

'I shall be gayer than any of them, and the greater contrast!' cries Cissy, springing to her feet. 'Come, Kennedy; despatch, despatch; I feel I shall hold my own yet.'

And Kennedy throwing herself heart and mind into her task, soon turns out the most charming picture possible.

As Miss Mordaunt enters the drawing-room she sees Halkett standing on the hearth-rug in earnest conversation with the widow, who, if there is a fire anywhere, is never any great distance from it. He has been telling her of his repulse of the night before, and is looking somewhat dejected.

'Never mind,' says Mrs Leyton kindly; 'get her alone; then you will have the advantage. I think she must have heard—or fancied—something that wounds her.'

'I do not flatter myself so far; I merely think she prefers Blake, and wishes to get rid of me,' says Halkett gloomily.

'Nonsense! Let nothing induce you to believe that. In the first place, she doesn't even look at the man in the right way.'

Halkett laughs in spite of himself, and immediately afterwards becomes if possible even more despondent than before.

'How can she like that fellow Blake?' he says ill-naturedly.

'Oh, I don't see that. For my part, I think him absolutely handsome.'

'Of course, that goes without telling. All women have a *tendresse* for those great coarse broad-shouldered men. And what an accent he has!'

'Do you really dislike it? To me, I confess it is rather pleasant; mellow, with just a touch of the brogue. Your Cissy, you must remember, has it too, with perhaps rather more of the mellow and less of the brogue; but then you are prejudiced against this poor Blake.'

'Indeed I am not; you mistake me altogether: I think him a downright good fellow. In fact I have a fancy for all Irishmen; they are so full of go—chee—good-humour, until crossed. And Blake is like all his countrymen, a most enjoyable companion,' says Halkett with suspicious warmth.

'Evidently Miss Mordaunt is of your opinion,' says the widow rather cruelly, pointing to where Cissy is listening with a smiling face to one of the major's good stories.

Meanwhile the guests are arriving; and the fine old room that has been given up to the dancers is rapidly filling with pretty girls and powdered dowagers and men of all ages and degrees. Papas too are numerous; but these instinctively crowd round Uncle Charlie, and by degrees edge towards a more dimly lighted room, where instinct tells them, whilst is holding silent sway.

'Will you give me the first dance?' says Halkett to Mrs Leyton, who readily grants her consent. Major Blake has of course secured Cissy; and presently, as ill-luck will have it, they find themselves in the same set, dancing opposite to each other. As Halkett's hand meets Cissy's, he hardly lets his fingers close round hers; and as she is also in a revengeful mood, the ladies' chain almost falls to the ground. Mrs Leyton, in spite of the good-nature that lies somewhere in her composition, nearly chokes with suppressed laughter as she witnesses this little by-play. She twits Halkett about it later on, but he is moody, and doesn't take kindly to her witticisms.

At least half the programme has been gone through before Captain Halkett asks Miss Mordaunt for the pleasure of a dance.

'If I am disengaged,' she says coldly, not looking at him, and searches her card with a languid bored air that tantalises him almost beyond endurance. He is longing to say: 'Never mind it; I won't interfere with your enjoyment this time,' with his sweetest smile, and rage at his heart; but he is too sternly determined to have it out with her to-night, to let his natural feelings win the day.

Cissy examining her card finds she is not engaged for the next dance, very much to her disgust; and is pondering whether she shall tell the lie direct and declare she is, when Halkett, as though he divines her thoughts, says abruptly: 'Not engaged for the next? Then I suppose I may have it!'

'I suppose so,' returns Miss Cissy reluctantly; and instantly turning from him, addresses her partner, as though such a person as Halkett were no longer in existence. Indeed, when after a quarter of an hour, he finds her in the conservatory and claims the fulfilment of her promise, it is with the utmost bad grace she places the very tips of

her fingers upon his arm, and looks impatiently towards the ball-room.

'I don't mean hanging just yet; I have something particular to say to you first,' says Halkett hastily, and almost commandingly, standing quite still. 'It is hardly private here. Would you find it too cold to come with me into the garden?' glancing at the open door of the conservatory.

Cissy hesitates; then fearful of seeming reluctant, says: 'No. If you will go to the library for my shawl (you will find it on the sofa), I will go with you.'

'You will stay here until I return?' says Halkett, regarding her intently.

Cissy stares in turn. 'Of course I will,' she answers rather languidly; and he goes.

'Did he imagine I would run away when his back was turned?' she soliloquises angrily. 'Does he suppose I am afraid? One would think it was I was in the wrong, not he. His conduct altogether is downright mysterious. I cannot understand him; and for the first time it dawns upon her mind that there may possibly be some flaw in the interpretation she has put upon his conduct.

Returning with the shawl, Halkett places it gently round her shoulders, and they pass into the quiet night.

'What a beautiful moon!' exclaims Cissy presently, hardly knowing what to say.

'Yes,' assents.

'And for this time of year, how wonderfully mild it is—not in the least cold—as one might expect.'

'Yes—no—is it not?'

'I really don't know what you think about it,' says Miss Mordaunt impatiently. 'I for my part find it almost warm; but of course I cannot answer for you. Probably all this time you are feeling desperately cold.'

This little petulant outburst rouses Halkett.

'No!' he says with sudden energy and warmth; 'I am not. It is not in my nature to be cold in any way. I feel most things keenly: more especially slights from those I love. All ill-concealed disdain, unkind speeches, fickleness, touch me closely.'

'I can sympathise with you,' says Cissy calmly. 'I think nothing can be so bad as inconstancy—except perhaps deceit.'

This retort being as unexpected as it is evidently meant, puzzles Halkett to such a degree that he becomes absolutely silent. Miss Mordaunt, with her white shawl drawn closely round her slight black-robed figure, walks quietly beside him with the air of an offended queen, her head held rather higher than usual, a pretty look of scorn upon her lips.

After a while Halkett pulls up abruptly and faces her in the narrow pathway. 'What is the reason of your changed behaviour towards me to-day and yesterday?' he says shortly. 'I think I have a right to ask that.'

'Have I changed?'

'Have you? Must you ask the question? The whole world sees it. You treat me with the most studied coldness.'

'I thought I was treating you with as much courtesy as I give to all my uncle's guests.'

'I don't care for courtesy,' says Halkett passionately; 'your hatred would be better than your indifference. Yesterday morning I believed we were

friends—nay, more than that; yesterday evening you ignored me altogether. It is either heartless coquetry on your part, or else you have a reason for your conduct. Let me hear it.'

'You are forgetting yourself,' says Miss Mordaunt coldly. 'You are the first person who has ever accused me of coquetry; you shall not do it again. I was foolish to come here with you, but—I trusted you. I wish to return to the house.'

'Nay, hear me!' cries Halkett remorsefully, following as she makes a movement to leave him, and catching her hand to detain her. 'Your avoidance has so perplexed and maddened me, that I said more than I meant or intended. Pardon me, and at least let me know how I have offended. Cissy, answer me!'

For a moment Miss Mordaunt hesitates, then endeavouring to speak lightly: 'I did not intend to perplex you,' she says; 'one cannot speak to every one at the same time. I am sorry if I appeared rude or neglectful; but you did not look very miserable, and surely Mrs Leyton was an excellent substitute for me.' She smiles as she says this, but pales a little too beneath the brilliant moon that is betraying her.

'Mrs Leyton is my very oldest and dearest friend,' replies Halkett; 'but no one on earth could console me for—your loss. Why will you not confess the truth, Cissy, and—'

'Yet you once loved her, if report speaks truly,' interrupts Miss Mordaunt, still speaking carelessly, though her heart-throbs can almost be counted. 'In India, we hear, there was a time when you would gladly have called her your wife. Is it not so?'

Halkett drops her hand.

'Has that miserable bit of gossip taken root even here?' he says with a faint sneer. 'Has Blake been making his cause good by such rubbishy tales? Frances Leyton and I grew up together. I would as soon think of making love to my nearest of kin as to her. The idea of any romantic attachment existing between us is more than absurd! Besides, she is to be married to Geoffrey Hyde early in the coming spring.'

Miss Mordaunt severs a little twig from one of the shrubs, and takes it to pieces slowly.

'Then she did not give you your favourite mare?' she says quietly, detesting herself as she asks the question, yet feeling compelled to solve all her doubts at once.

'No; she did not.' A pause. 'Shall I tell you who gave her to me? It was my only sister, Lady Harley. She loved the Baby dearly, and on her death-bed, told me to take good care of the creature, for her sake.'

The twig falls from Cissy's fingers. Surely, surely it cannot be true! Oh, how he must hate and despise her for all she has said and done! It is too late now to make reparation. She feels she would rather die a thousand deaths than give in, and confess to all the wretched suspicions and jealousies she has been carefully harbouring in her heart during these two past days.

'However, all this is beside the question,' goes on Halkett; 'you have not yet told me what I so much want to know. Has Blake anything to do with your coldness to me? Tell me, Cissy, are you engaged to him?'

Cissy has not expected this, and growing

suddenly crimson, lets her head droop somewhat suspiciously. Halkett's eyes are on her face.

'No; of course not—I am not indeed.' There is a faint stammer in her speech as she says this, and Halkett's fears become certainties.

'But you *care* for him!' he exclaims vehemently. 'The very mention of his name has brought a flush into your cheeks. You hesitate, and turn your head aside. This then accounts for your sudden change of behaviour towards me! Having gained your point, you found your first victim in the way, and hardly knowing how to get rid of so troublesome an appendage, had recourse to—— Had you told me point-blank my attentions were unwelcome, it would have been more womanly, more just'——

'Pray, do not say another word,' says Miss Mordaunt with dignity, though tears are in her voice and eyes; 'this is the second time to-night you have spoken words difficult to forget. Do not trouble yourself to return with me. I prefer going in alone.'

When Cissy and Halkett appear at breakfast the following morning, they take care to seat themselves as far as possible from each other, and presently it becomes palpable to every one that they are considerably out of sorts. Uncle Charlie suggests that Miss Cissy has over-danced herself, or given the wrong man his *congé*; a remark that has sufficient truth in it to bring the hot blood into her cheeks. While Captain Halkett, having run through his letters, declares he must return to town by the afternoon train; at which Mrs Leyton looks uneasy, and casts a covert glance at Cissy Mordaunt.

That young lady stands fire pretty well, but with all her hardihood cannot keep her under lip from trembling ever so little. This sign of weakness be assured does not escape the widow's tutored eye; and she instantly challenges Major Blake to a game of billiards after breakfast.

'My dear Frank, you can't go to-day,' says Uncle Charlie decidedly. 'To-morrow they have promised us the best run we have had yet. I will not hear of your leaving. Write and tell her you have sprained your ankle, and send her your undying love. She will forgive you when she sees you.'

'I wish I *could* stay,' says Halkett, laughing; 'but unfortunately my recall is from my solicitor, not from my lady-love.'

'I don't believe a word of it!' says Uncle Charlie. 'A sudden recall *always* means a woman. Why, when I was a young man, I thought nothing of'——

'My dear!' says Aunt Isabel, with a gentle uplifting of the right hand.

'Quite so, my good Belle,' returns Uncle Charlie, patting the soft white fingers. 'But seriously, Frank, she will do very well without you.'

'I have no doubt of that,' says Halkett, and raising his eyes meets Miss Mordaunt's full.

Half an hour later, Cissy, feeling mournful and guilty, steals round to the stables to take a last look at the Baby, as she is afraid to look at the Baby's master. Just as she is patting her and rubbing down the soft velvet muzzle, the door opens, and Halkett enters.

'I am glad to see she is so much better,' says Miss Mordaunt promptly but nervously, pointing

to the injured limb. 'If you go to-day, you will not take her with you, I suppose?'

'No; I suppose not.'

'Must you go?'

Halkett glances at her reproachfully. 'Yes; of course I must. There is no other course left open to me. After what you told me last night, it would be simple madness to remain.'

'What did I tell you? I don't think I told you anything.'

'Well—what you led me to infer.'

'You should not infer things. I never meant you to do so.' As Miss Mordaunt says this in a very low tone, she turns her head aside and recedes a step or two. A dark flush rises to Halkett's brow, colouring all his face, even through the bronze an Indian sun has laid upon it. A sudden gleam of something akin to hope shines in his eyes for an instant, but is as speedily suppressed.

'Do you know what you are doing?' he says in a tone sufficiently unsteady to betray the agitation he is feeling. 'Do you know what your manner, your words seem to me to mean? Do not, I implore you, raise within me again the hope I have surrendered, unless—— O Cissy, you will never know how cruel a thing it is to love without return!'

'But—are you sure—*your* love—has gained no return?' demands Miss Cissy in faltering accents, and immediately afterwards feels she has but one desire on earth, and that is for the ground to open and swallow her.

'Cissy, Cissy!' cries Halkett, 'tell me you do not care for that fellow Blake!'

'Not a bit, not a bit!' says Cissy; and in another moment finds herself in Halkett's arms, her tears running riot over the breast of his coat. 'Oh, say that you forgive me!' she sobs. 'It was most hateful of me—about that bedroom candlestick the other night, and everything. But I misunderstood it all. I thought you loved Mrs Leyton. Say that you forgive me!'

'I will not hear a word about forgiveness now,' says Halkett, who has been assiduously employed in kissing her hair, brow, and any other part of her face that is visible. 'It is taking a mean advantage of me; I am so happy this moment, I would forgive my bitterest enemy without hesitation. By-and-by we will discuss the question, and I shall grant you pardon on my own terms.'

Some time before luncheon there comes a knock, low but decided, at Uncle Charlie's library door.

'Come in!' calls out the owner of the apartment; and the door opening admits Frank Halkett and Miss Mordaunt—the latter keeping well behind, and only compelled by the strong clasp of her companion's hand to advance at all.

'I have come, sir,' says Halkett mildly, 'to tell you I have, after all, decided on delaying my departure until next week, as I at first intended—if you do not object.'

'Indeed, indeed; I am glad of that,' says Uncle Charlie, just a wee bit puzzled. 'I need not say how welcome you are.—But what about the business letter, eh, and your hot haste to reach town? What has changed your plans, eh?'

'Miss Mordaunt,' says Halkett, with a mischievous glance at Cissy, who is hopelessly confused and horribly shamefaced, in the background. 'Miss Mordaunt has induced me to alter my mind.'

'Eh! what, what?' says Uncle Charlie, rising from his chair as the truth dawns upon him, and instantly sinking back into it again. 'You don't mean it! And all this time I could have sworn it was that fellow Blake!'

And so were made happy a pair who, through a mutual misunderstanding, might have never come together again in this world; who, but for an accidental timely explanation, might have remained through life victims to Cross-purposes. Reader, remember that there are two sides to every story.

POLAR COLONISATION.

TOWARDS the end of February the Naval Committee of the House of Representatives at Washington reported a Bill authorising the American government to fit out an Arctic Expedition, which would establish a colony on Lady Franklin's Bay, and thence despatch exploring parties to the Pole. To influence congressional action in this matter, two or three pamphlets have been put forth in America, and circulated among the members of both houses. In one of these, Captain Henry W. Howgate, U.S.A., advocates the doctrine, that to reach the Pole with the greatest certainty, and with the least expenditure of time, money, and human life, it is essential that the exploring party be on the ground at the very time when the ice gives way and opens the gateway to the long-sought prize. This, he affirms, can only be done by colonising a few hardy, resolute, and experienced men at some point near the borders of the Polar Sea.

The same idea, in a somewhat different form, is advocated by Mr R. W. D. Bryan, of the United States' Naval Observatory at Washington, who, at Captain Howgate's request, has expounded in a brief pamphlet his views in regard to the best methods of conducting Arctic exploration. Mr Bryan says that he has given the subject much thought for many years, and has carefully examined the rich treasures of Arctic literature. This study, and his own experience and personal observation during the *Polaris* expedition, have suggested to him a plan which seems comprehensive and practicable. He is opposed to all spasmodic efforts to reach the Pole, because the chances of success are not commensurate with the necessary outlay. Let a vessel, he says, be always ready at some advanced post to push forward whenever an opportunity offers, for it is well known to Arctic explorers that Polar ice moves, shifts its position, and breaks up, sometimes slowly, and at other times with great rapidity, and that its position and condition change from year to year; hence in the same place success in one season may follow the defeat of a previous one. If, therefore, a vessel be at hand when the movement carries the ice out of her path, she can advance; and if, unfortunately, she should have no such opportunity, her officers and crew, by their observations and their boat and sledge journeys, would be able to employ their time profitably; the chances, however, would probably be in favour of their finding some season sufficiently open to admit of their forcing the vessel towards the Pole. In connection

with the ship, which is thus to watch year by year for a friendly ice movement, Mr Bryan would have a station established on the land within easy communicating distance, and yet not so far north as to prevent its being visited at least once in every two or three years by a ship from the parent country. The plan, no doubt, is one which would conduce to eventual success; but we should fancy that even the hardest enthusiasts would shrink from an undertaking which would involve their spending annually from four to five months in total darkness, even though 'the station should afford warm comfortable quarters for a corps of scientific observers and an active band of explorers.'

We cannot follow Mr Bryan through all the details of his original plan, but it will be interesting to glance briefly at a bolder and more comprehensive one which he develops towards the conclusion of his *brochure*. He says, and with reason, that a greater certainty of speedy success and the collection of scientific data beyond all measure more valuable, would follow the enlargement of the scheme he has propounded. 'Instead of establishing one station, and having but one ship watching tirelessly the mysterious movements of the ice, let there be many stations and many ships placed at intervals along the whole threshold of the unknown region.' To this, of course, the obvious objection arises that the plan would involve the expenditure of a large amount of money; but Mr Bryan is equal to the occasion, and perhaps taking a hint from the king of the Belgians' proposition with regard to African exploration, he suggests that the enterprise should be an international one, for in that case the burden upon any one nation would be comparatively light. Mr Bryan has gone further, for he has partitioned the work among the nations. Great Britain is to grapple with the difficulties of the Behring Strait route, and in addition, to take a turn at 'the eastern coast of Wrangell's Land or the western coast, or both.' This, we imagine, would keep Sir George Nares occupied for some time. For the United States is claimed the right to consider the Smith's Sound route as peculiarly its own; and the Germans are to undertake 'the eastern coast of Greenland, the route advocated so long and so well by their illustrious geographer Dr Petermann.' The Dutch are to take Spitzbergen for the base of their operations; the Austrians are to follow up Lieutenant Payer's discoveries in Franz Josef Land; and the Russians are to establish stations upon Novaya Zemlya and some of the extreme northern points of their empire. Italy, Norway, and Sweden, France, Spain, and Portugal have minor parts assigned to them; but hardly Denmark, oddly enough, is overlooked.

Mr Bryan thinks that the money laid out on these enterprises would be 'well invested, and would give an ample and speedy return in every department of human industry.'

Since the foregoing was written, intelligence has been received that arrangements are actually in progress for carrying out Captain Howgate's bold plan of prosecuting Polar discovery. The expedition, we hear, will be under the command of Captain Tyson, of *Polaris* fame, and it was intended that it should leave at once for the Arctic regions to select a position for the planting of a colony in 1878. The funds required for this advance voyage (about ten thousand dollars) will be raised by

subscription in New York; and it is expected that Congress will in autumn appropriate fifty thousand dollars to cover the expenses of despatching the colony.

A FEW WORDS ABOUT POULTRY.

THERE is no species of live-stock less understood or less cared for than poultry. Almost every farmer and nearly every cottager in the country keeps hens, as well as a great number of people about the suburbs of all large towns; and strange as it may seem, if you ask them as to the profitability of their stock, you will almost invariably be met with the answer that 'hens don't pay.' Many people of course never take the trouble to find out whether they pay or not, but go on rehearsing the story of others who do take that trouble, and who find it an unprofitable job. With a large number of poultry-keepers this is really the case; and there must therefore be a certain fascination about fowls that induces such people to keep them. The secret probably is that fresh eggs being such an adjunct to the breakfast-table and to the making of savoury omelets and puddings, hens are kept to lay eggs, no matter how few, or at what cost. Some people, however, do make them pay, and pay well too; but it is only by properly directed intelligence being brought to bear on the subject, as well as by the exercise of a good deal of care and attention, that this object is attained. Many an amateur keeper of poultry is able during the spring months to sell as many eggs as he can part with at prices ranging from six shillings to a guinea per dozen—such eggs being the produce of prize poultry, and such prices being given in order to rear chickens from them. It is therefore principally amateurs, fanciers, and people who take delight in and bestow care and attention on their birds, that are able to reap satisfactory results from the rearing and keeping of poultry. If care and attention were not brought to bear on the rearing of horses and cattle, these would not pay either; but hens are, by farmers especially, usually considered too insignificant to bestow much trouble on; therefore they are often allowed to run about starved and ill cared for at one time, and glutted with food at another; while their roosting-houses from want of cleaning become so filthy that it is a wonder the birds so frequently escape the diseases which filth engenders, and to which the feathered tribe are so liable.

It is certainly not creditable to this country that the importation of poultry and eggs is so enormous, and probably few persons are aware of its extent. In 1875, the latest year for which the Board of Trade returns have been completed, no less than seven hundred and forty-one million of eggs were brought into this country; and the returns of the immediately preceding years show that this importation has been making gigantic strides. Most of these eggs come to us from France; and when we consider that the French themselves are large consumers of both eggs and poultry, it may well be imagined to what an enormous extent our friends across the Channel develop this branch of trade or commerce. The advantage which our continental neighbours derive from it is obvious when we consider that not only eggs but fowls are largely sent over to us; and that about three millions of pounds sterling are now annually paid

by Great Britain for these two staple articles of consumption. Farmers and poultry-keepers should lay this well to heart, and endeavour by some means so to increase the production of poultry and eggs, as not only to secure the retention of a large portion of this money in our own country, but to fill their own pockets with a portion of it.

In our observation and experience the point on which most ignorance prevails with regard to poultry is food. No attention or intelligence appears to be directed to the kind, quantity, or time of feeding that is most suitable; and nowhere is this ignorance more noticeable than at farm-steadings. At such places, hens are generally allowed to surfeit themselves with grain at one season, while they are starved at another. Now they do not lay well while they are either in the one condition or the other; for a starved bird has not the wherewithal to produce eggs, while an over-fed one gets lazy and accumulates internal fat, to the extinction of egg-production altogether. Hens never lay so well as when they are kept in a state of activity, running after meat that is thrown to them, or searching and scratching for it among earth or rubbish. After moulting-time, or when hens have been as it were resting from laying eggs, one of the first things that to a keen observer heralds a speedy return to that state, is the restless activity with which they scrape and scratch the ground. When their courts or haunts bear evidence of this by the holes which they make, laying is not far off. A happy medium in feeding produces the best results with poultry; and a golden rule is never to give fowls more at a time than they will greedily pick up. Indeed they should always be made to leave off before their appetite is satiated. Their meals should be given regularly, and should be thrown on the ground to them, not left in wooden troughs, which readily sour and taint the meat. But whether given on the ground or otherwise, not a particle should be allowed to lie over, for nothing injures hens more than stale food.

The number of meals in a day may vary according to circumstances, but for adult fowls no more than three should ever be allowed. Where hens have full liberty to roam about a farm-yard or in fields, only two scanty meals should be given both in summer and in winter—one in the morning as early as possible, and the other about an hour before they go to roost in the evening. Birds which are confined to courts or runs should have a more substantial meal—not later than nine o'clock in the morning in winter, and an hour or two earlier in summer, with a pick of something at mid-day, besides their evening feed. Grain of some kind should always be given them at night; wheat, rough barley, or oats, are all good, but ought to be used singly, not mixed; and it is well occasionally to change the variety. Indian corn seems to be more relished than any other grain, but should be sparingly given, and never longer than a very few days at a time, just for a change, as it has a very fattening tendency. The morning meal may consist of table-refuse of any sort mixed to a proper consistency with sharps, middlings, bran, or barley-meal. The mixture should neither be too sloppy nor too hard, but such as if thrown on the ground in a lump will break into bits, not crumble down into a state of powder. Potatoes are bad to use in large quantities, for like Indian corn

they are too fattening; boiled turnips, however, may be used with advantage for mixing. In winter it is best to give the morning diet warm, with an occasional sprinkling of pepper during very cold or wet weather. A very little salt may likewise be added. The mid-day pick may either consist of the morning's remains or a little grain; but on no account should soft food be given after it has stood for any length of time. It can be mixed up at night, but what is then prepared should all be used up on the following day. Grass or green food of some kind is requisite to keep poultry in good condition; and if the birds have not free access to it, a little cut up and mixed with their food, or a cabbage or lettuce hung up with a string just within reach of the birds, so that they may get at it with a little trouble, is a very valuable accessory to the dietary. It is absolutely necessary that green food be given regularly, if fowls are expected to thrive; but the amount of it need not be great; only if it is left off for a time and then resorted to, or given in too large quantities, it is likely to cause diarrhoea.

It is very difficult to define the exact quantity of food that ought to be given to hens, and it is well to remember that at some seasons they will eat much more than at others; but as a general rule for those in confinement, a ball about the size of a duck's egg in the morning, half of that at mid-day, and an average-sized handful of grain at night, is about the proper quantity for each bird; and less than that of course for those that have fields or farm-yards to roam in. The tendency with most poultry-keepers is to feed too well, and it is generally very difficult to get them convinced of this, for hens will go on eating long after they have had enough; but the consequences are always bad, such as accumulation of internal fat and the laying of soft or shell-less eggs. This latter disease—for so it may be called—is a very common effect of over-feeding young hens, and is sometimes not observed till it has existed for some time, as such eggs are often eaten by the birds as soon as laid, and if they are not caught in the act, those who keep them may be none the wiser. The quickest and most effectual way to cure the effects of over-feeding is to administer a good dose of Epsom salts in their soft food in the morning, and to starve them till the following day. Indeed such treatment to overfed fowls that have gone off laying will often bring them into that condition again at once. Poultry should always have access to plenty of cool fresh water; and if the dish containing it cannot be kept in a cool or shady place, the water should be frequently renewed, especially in warm sunny weather, for nothing is worse for hens than sun-warmed water. It is also important that a handful or two of small stones or gravel be occasionally thrown into their runs, if the ground itself is not gravelly, for hens swallow such stones to assist the gizzard in triturating their food. It is considered that lime or old mortar is necessary for the production of egg-shell, but we cannot speak authoritatively on this point, for we have kept hens for years, and never yet saw them swallow a piece of mortar, although they have access to it; but we are bound to admit that oyster-shells, broken up small, are at certain times swallowed with great avidity, if fowls can obtain them.

Next to the importance of good systematic feed-

ing, if not even before it, ought to come cleanliness. Some people never think of cleaning their hen-houses and hen-runs; but it ought to be carefully and regularly done; and the inside walls and roosting-bars should be whitewashed at least twice every year. In connection with this, it may be mentioned that nothing is worse for a hen-house than a wooden floor, as it soon gets saturated with their droppings, and becomes rotten, when it is impossible to clean it. A stone or cement floor, or even an earthen one, is greatly superior to one made of wood; and if such a floor be kept thickly strewn with fine coal-ashes, sand, or dry earth, this helps to deodorise the dung, and is easily cleaned—besides the whole makes a very valuable manure, which can be used in the garden. The floor or ground of the court or run should be earth, the surface of which can be lifted off occasionally with a spade, and then dug up to freshen it. At such times, the birds will get a feed of worms, which will do them much good.

Fowls clean themselves by means of dust; and if they have not access to it, they readily become infested with a species of small lice. Finely riddled coal-ash or dry earth laid in a sheltered corner of their run will answer the purpose. It should be renewed occasionally, and a little flowers of sulphur or carbolic powder sprinkled on it. It is very amusing to see the birds lying in their baths and shaking the dust all over and through their feathers. They seem to take great delight in this occupation.

The variety to be kept depends on circumstances, that which suits one locality being unsuitable in another. Many people keep what are called barn-door fowls, that is, a cross of all sorts of breeds, but experience shews that such fowls are not profitable either for the table or for laying. Occasionally one hears that there is nothing like them for laying; but those who speak thus have seldom much experience of pure breeds; and because they now and again find cross-bred birds laying remarkably well, they are too apt to sound their praise. A first cross between two pure breeds, such as the 'Dorking' and 'Spanish', or 'Game' and 'Spanish', sometimes produces very fine profitable fowls; but if these are again allowed to mate with other crosses, the progeny always degenerates. The Dorking is perhaps the most common and well-known variety in this country, and holds a good reputation for size and quality as a table bird, also for its laying powers. It does not thrive, however, in all localities, requiring a dry soil and extensive range to roam on, and is essentially a farmer's bird. Dorkings make good sitters and mothers. The variety is bred to perfection, principally in the counties of Sussex and Surrey. The general favourites of 'fanciers', owing to their symmetry of form and beautiful plumage, are the several varieties of Game; but they are somewhat troublesome to keep, owing to their fighting proclivities. Spanish hens are good layers of large eggs, but the breed is a delicate one, difficult to rear, and difficult to keep in health. Cold and damp affect them much; but they sometimes do well in confined runs, if these are dry and sheltered and their houses warm. 'Brahmas' and 'Chickens', two Asiatic breeds, created quite a sensation on their first being brought to this country about a quarter of a century ago, and large prices were then paid for them. As chickens they take a long

time to grow, but ultimately attain great size. They are both good layers, especially in winter, when eggs are dear, but are inveterate sitters; and the time lost by this propensity often neutralises the profit which might be made from their egg-producing qualities. 'Hamburgs' lay numerous eggs of a rather small description. The French varieties have been gaining ground in this country for some years back, the 'Houdans' being splendid table fowls, with good white flesh and small bones. They grow very fast as chickens, but do not generally begin to lay till well matured. 'Crève-cœurs' also grow quickly to a good size, but have not much reputation as layers. The latest breed—which, however, has not been known in this country more than a few years—is the 'Leghorn,' for the introduction of which we are indebted to the Americans, who imported the first birds of the kind from Leghorn about twenty years ago, and have since then been improving the variety. It would appear to excel most others for early development and splendid laying powers, and is fast taking a prominent place with poultry-keepers. Prize birds of all distinct varieties are very valuable, sometimes fetching as much as twenty-five pounds for a single bird to shew and breed from.

It is a great mistake with some people to keep too many birds, and we have noticed again and again where a keen amateur has very reluctantly been persuaded to kill off or dispose of a portion of his stock, that instead of his egg-basket suffering owing to the fewer birds kept, it has actually become fuller than before. Only a certain quantity can be kept on a given space, and if more than this is attempted, failure must be the result. The proper number can be arrived at only by experience, but no cottager with limited accommodation should attempt to keep more than about half-a-dozen. The worst layers should be killed after their first season's laying, just before they commence to moult or cast their feathers—say about July or August; for if allowed once to begin this process of renewal, they are useless for the table until the whole of the new feathers grow again; and this sometimes occupies months, during the whole of which time laying is generally suspended. The best, however, should be kept over their second season's laying, and then killed before moulting; and none but the very best should ever be allowed to see a third season, for age is a very unprofitable and increasingly unprofitable possession. From one hundred to two hundred and fifty eggs may be expected from a good bird in the course of a year; and those which lay less than a hundred are not worth keeping. It may be mentioned that the addition of a cock to the run makes no difference in the number of eggs which the hens will lay; it is unnecessary, therefore, to keep a cock unless chickens be desired.

THE WALMER LIFE-BOAT.

HARK ! a distant gun is sounding
O'er the waters, wildly bounding ;
Raging waves are fast surrounding
Some wrecked ship to-night.
On the shore the breakers, roaring,
Loud as thunder now are pouring ;
Far a signal high is soaring,
Like a phantom light.

Moon and stars their aid denying,
E'en to seek the living—dying—
Who, to prayers and tears replying,
Will the tempest face ?
Oh ! for some brave ocean-ranger,
Who would, through the cold and danger,
Go to save, perchance, one stranger !
Silence, for a space.

Hark ! the Life-boat bell is ringing,
Gallant men are wildly springing,
Life and home—their all—they're dinging,
So the lost they save.
Rockets now are brightly flashing ;
Through the shingle sharply crashing,
Off the Life-boat's swiftly dashing.
Heaven guard the brave !

Through the night, that wanes so slowly,
'Little ones,' in accents holy,
Mothers, wives, in dwellings lowly,
Breathe their heartfelt prayer.
When the stormy sea is swelling,
Aching hearts in regal dwelling,
All their pride and power quelling,
Kneel as helpless there.

While the torches, dimly burning,
Shew the tide at last is turning,
Hundreds wait, for tidings yearning,
Watch, with eager eyes ?
See ! the first faint glimpse of morning
The dim eastern sky adorning ;
Hark ! the soldiers' bugle, warning
That the sun doth rise.

Then a little speck grows clearer,
Draws—it seems but slowly—nearer,
Seen by those to whom 'tis dearer—
Known by them too well !
Brighter now the morn is growing,
Clearer, still, and clearer, throwing
Light upon the billows, shewing
'Tis no dream we tell.

Past the fatal sands they're leaving ;
Hail ! the Life-boat, proudly cleaving,
Where the angry sea is heaving
Mountain-waves of foam.
Onward, homeward, quickly nearing,
'Mid the ringing, deaf'ning cheering,
Loving words of welcome hearing,
Greet the conquerors home.

Far away the wreck is lying ;
But they bring, 'neath colours flying,
Five poor Frenchmen, spared from dying,
Safe to England's isle.
English hands they're warmly pressing,
English children they're caressing,
Asking, praying, Heaven's blessing,
With a tear and smile.

Simple words tell acts of daring—
Unknown heroes laurels wearing,
Brother-like all honour sharing,
Now and evermore.
Speed the Life-boat, England's daughters ;
Bless her path across the waters ;
Tell her gallant deeds of glory ;
Spread the truthful, noble story,
Far from England's shore !

AUGUSTA A. L. MAGRA.

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PETER BOTTE.

In the island of Mauritius, in the Southern Ocean, stands Pieter Both (or Peter Botte), one of the strangest shaped and most inaccessible mountains in the world. From the sea it is most calculated to impress beholders. Its quaint shape towers above the rugged mountain mass which again dominates over Port-Louis; and its still quaint name dates from so far back as 1616, when Pieter Both d'Amersfort, a Dutch admiral, or General of the Sea, as he is described in the records, happening to be shipwrecked on the island, was perpetuated by name in the mountain which cast its shadow across his drowned body.

The travellers' tales which are heard beyond the seas of the ascents of a mountain, insignificant in size, but by reputation ranking with monarchs of Alpine celebrity, have contributed to lend a grandeur and a mystery to Pieter Both in the imaginations of those who approach him for the first time. Though various ascents have been made from time to time (one of which was described in this *Journal* as far back as 1834), that made in June 1876 by a party of eleven seems to have been of special interest, as the following narrative, from the pen of one of the party, will shew. His story runs as follows:

An Indian, Deesbee by name, a carriole driver by calling, by repeated ascents has made himself so much at home on the mountain as to be able to arrange a system of ropes and rough rope-ladders by which any one with a good head and fairly strong muscles can reach the top with comparative ease. Deesbee is a short square-built East Indian, with a pook-marked face, whose dress on the last time I saw him was a soldier's old tunic, and a lady's 'cloud,' also old, about his head and chin. This worthy, after the preliminaries are settled with the leader of the expedition, purchases a coil of two and a half inch Manilla rope, arms himself with a wonderfully battered horse-pistol and a broken cutlass, takes into his confidence sundry others of his countrymen, and starts up the mountain the day previous to that on which the ascent

is to be attempted. Upon the 'Shoulder,' which I shall presently notice, he has built a small hut, where he and his band sleep; to me, who saw it empty, it seemed just capable of holding half one man, with the contingency that his other half would dangle over a precipice some hundreds of feet high. In the morning the ropes are fixed; the 'Ladder Rock' being ascended by means of a pole; the pistol is used to fire a line over the head, by which the rope is gradually hauled up; the cutlass is for cutting the rounds of the rope-ladders from the bushes; so that if all goes well, when the party gather on the 'Shoulder' they will see above them the whole apparatus, strangely suggestive of the Old Bailey on hanging mornings, with Deesbee and his crew clinging thereto—a black Jack Ketch to perfection.

Pieter Both itself is one of a score of peaks situated in the rim of a gigantic crater, which can be traced at the present day from itself on the north to the Black River Mountains on the south, a distance of more than twenty miles. A mountain called 'The Ponce,' so called from the resemblance of its peak to a man's thumb, lies immediately above Port-Louis, and forms a well-known feature in the views of that town. After the Ponce, which is thirty-six feet only lower than Pieter Both, the crater-wall becomes a wall indeed. Its northern face falls down in sheer precipice to Pamplonouses, two thousand feet below its crest; the reverse, no less steep, facing the valley of Moka, green with sugar-canes, and fifteen hundred feet below. This wall is broken into several peaks, of which the last is Pieter Both, having an elevation above sea-level of two thousand six hundred and ninety-eight feet, according to a recent survey made by the colonial surveyor.

At La Laura, a sugar-mill about ten miles from Port-Louis, the final arrangements are made for carrying up the provisions and other impediments, including on this occasion a photographic apparatus; and that satisfactorily arranged, comes a trudge of a mile along a gently ascending cane-road.

As the path nears the woods we find their

margin impervious with the matted undergrowth; the bright green of the wild raspberry, with its hairy fruit, and long straggling branches armed with fearful thorns; the scarlet and orange blossoms of the *Lantana*; while the snowy white and pink blossoms of the many other species of underwood crowd in beneath the shade of the taller trees in a many coloured parterre.

Side by side with many other curious varieties of trees will be noted the fluted stem and broad spreading top of the mighty Sambalacoeque, now fast disappearing under the axe. On either side of the road which winds along this forest line are the tall sugar-canes, like walls high above our heads, the silver-gray blossoms waving in the softly blowing trade-wind; the rain-drops hanging from their leaves, falling in showers, and giving a none too welcome hint of slippery work a little higher up. Between Pieter Both and the mountain ridge that joins him with the Ponce is a steep gorge, wide at the base, narrowing gradually till it ends abruptly in a gap some fifteen yards across, and about four hundred feet below the summit. You can climb up to this gap, but it requires to be cautiously approached, for on looking over its edge, sharp and knife-like, you will find yourself looking down a precipice of naked rock some two thousand feet deep. The lookout is grand beyond description, and you will make out Port-Louis harbour, looking about the size of the Round Pond in Kensington Gardens, and Pamplémousses Church a dot immediately below you.

The path ends with the canes; and that which we follow after leaving them we make for ourselves. But upwards is the right way; you can't go wrong, for the ravine is like a funnel cut in half, and the easiest slope lies in its centre, to which we all gravitate by a sort of 'natural selection.' The forest is dense under foot and overhead; perhaps it is as well that it is, for without clinging on to the branches and tree-stems, and swinging bodily by them up bad places, the lower part would be as difficult as the upper. The forest primeval, silent and gloomy, shuts out the light, and the air feels hot and stifling. Dead trunks lie rotting on all sides, mere touchwood many of them, resenting our footsteps by a cloud of dust; giving homes to a variety of lovely ferns, including the harts-tongue, which grows in tufts on the dead-wood wherever its roots can penetrate. Everywhere strange forms meet the eye, as if Nature in a frolic had run wild to form them. From the branches depend long trails of 'lianes,' ropes that twist and twine and squeeze the life out of the trees they fasten on. Orchids are here also, fleshy leaved, with no apparent roots; and black shapeless masses perched in the higher tree forks, the nests of the destructive white ant. Mosses clothe the ground with an emerald tapestry, beautiful to the eye, but treacherous and squelching full of water under foot. Everywhere is a rank garden of luxuriant dripping vegetation, which, speaking as to comfort, we could have done without.

After a stiff climb, the funnel narrows visibly, and we get into the central watercourse, where there is free space to breathe and less vegetation. The path is rough, macadamised by gigantic boulders, moss-grown and slippery, standing at incalculable angles, very tedious to clamber over, amongst which a sharp lookout has to be kept to preserve our poor dear shins. Gradually the trees, hitherto a green arcade overhead, thin away, and the water-course emerges into a steep grassy slope, growing steeper at every step. Above, facing us, is the gap spoken of already; on the left is the mountain ridge; on the right rises old Pieter Both, cold, gray, and menacing—and a long way up. The ravine has narrowed to some fifteen yards; here and there is a scrubby bush. The water-course is now the only way possible to climb by, and in two places there are in it rocks twelve feet high standing straight up, which have to be clambered over somehow.

Above, on the right, is the 'Shoulder,' a narrow projection about twenty yards long, and two or three wide, on which breakfast is to be eaten and preparations made for the final climb. To reach this 'Shoulder' appears a sufficient task from where we are; beyond it rises a smooth perpendicular cone, without flaw or crack, mid air, apparently impossible. Yet as we bend back our heads and say so, out of one side far up, springs a small figure; and the word 'impossible' is wiped out of our dictionaries when we behold that a 'black man and a brother' has essayed the task. Up to the 'Shoulder' it is all hands and feet; beyond that there is nothing for it but rope. Viewed from a distance, the 'Shoulder' forms the knees of the sitting figure which the mountain is said to resemble. From many points the resemblance to the statue of Her Majesty at the London Royal Exchange is ludicrously exact.

When the top of the grass slope is reached, there is a narrow band of turf, dotted with half-a-dozen scrub bushes of a foot or little more high. This band leads off horizontally to the right, and is the only possible way to the 'Shoulder.' A very bad way indeed it is. From below it looks nothing but a strip of green ribbon stretched across the middle of a rocky face, black and green and slimy as ever earth, air, and water put together have concocted to puzzle mountaineers. In truth it is little better than it looks. There are toe-holes to stick your boots into as you walk with your face to the wall; and here and there a shrub to let you feel something between your fingers, besides a bunch of dead damp grass to save you from eternity. The whole passage is oozing with sludge and water, very slippery, and the grass looks utterly rotten and unreliable.

This track, which is about one hundred yards in length, lands you a little below the 'Shoulder;' then a dozen yards' stiff steep climb and you stand upon it—perhaps sit at first—for a yard farther on across it is space, sheer awful space, which to look down till you have got your breath is neither wise nor pleasant. You soon get used to the feeling; but it is a little startling just at first to find that this promised landing-place where breakfast is to

be served ends in nothing, just three feet beyond the baskets that contain the provender. When you have got your breath, the first thing to look at is the great bare cone immediately above and the dangling rope up which your road must lie. Your eye takes it all in at a glance, and that first glance is not promising. But breakfast puts a better construction on the onward journey; and by the time we have made acquaintance with the Oxford sausages and Australian sheep's tongues, we begin to scamble about quite merrily, and doff boots, coats, and hats for the task with as jaunty a grace as did my Lord Russell on Tower Hill.

The summit of Pieter Both is a cone of sugar-loaf form, compressed at the sides, that nearest the 'Shoulder' having a slight bulge, without which the ascent would be certainly impracticable. From the 'Shoulder,' which is covered with short grass and wind-scarred scrub, a ridge some three yards wide runs up to the foot of the 'Ladder Rock.' This ridge, which narrows as it goes up, is composed of rock-fractures firmly cemented together, and is to all appearance a great buttress supporting the cone. Up this you climb, hands and knees, without requiring a rope. The buttress comes to an abrupt end at the foot of a huge cube of rock, flat-sided and perpendicular, which stands bolt upright, and bars all further climbing without mechanical aid.

This is the 'Ladder Rock,' and is between fifty and sixty feet in absolute perpendicular height, its breadth being less than twenty feet. Running down its centre is a crack, without which the difficulty of climbing it would have been greatly aggravated, if not insurmountable. Against the face of the 'Ladder Rock' hangs a rope, the end disappearing over the upper edge where it has been made fast; the climb up it being made easier by a rough rope-ladder, which takes you up some dozen feet, to where the crack is sufficiently wide to admit your toes; that reached, grasping the rope with every one of your ten fingers, and squeezing as many of your toes into the crevice as you can, you must trust to your muscles and swing yourself up. The top of this rock reached, you are glad to sit or lie down upon a second ridge like the lower one, but much steeper and narrower; so narrow that in climbing up it, still with the rope tightly grasped, you sit astride it, your legs dangling over the sides, where it is better not to let your eyes follow unless the head that owns them is of the steadiest. This ridge has been christened 'The Saddle,' and is made up of broken rock cemented together with lava. Here and there are tufts of grass, with bosses of the silver-leaved 'everlastings,' wind-torn and ragged, and other plants. The 'everlastings' shew brightly against the cold gray rocks, and tempt many of the party to pluck them to adorn their hats when they get them; which just now is somewhat doubtful, as the slightest slip may be fatal. This dreadful 'Saddle' is said to have once vanquished two aspirants; one of them, conscious that he had 'lost his head,' lay flat along the ridge, allowing the man who came to his rescue to climb over his body, a ticklish bit of mid-aërial gymnastics, which happily came off successfully.

The 'Saddle' rises at a steep angle, say the steep roof of a house, and ends at another 'face'; a huge rounded rock perhaps ten feet high standing straight up across the way, the way now having narrowed to a blunt-knife edge. This is

the 'Saddle Rock,' and is the nastiest-looking and most dangerous place in the ascent. The 'Saddle Rock' must either be swarmed up or circumvented by stretching round its left side; for both experiments a rope is needed, and both are a trifle delicate. This time the rope went round; and the thread which disappeared past the smooth slippery face, out over the ghastly precipice, that fell down sheer into Pamplemousses, was not inviting. To get round you have to side up to the base of the rock, holding the tightly stretched rope level with your head, and push on your feet inch by inch till your toes rest on the outermost knob of rock. You must be quite sure that their hold is good before you slip your hands round the corner, letting your head and shoulders follow until you can make out a little branch as thick as your umbrella, and four inches long, which sticks out of a cranny, and is within reach of a long straddle. The awkward part of this is that in looking for the branch you are obliged to look down. It is the first look-down absolutely necessary, and it is one not easily forgotten. To the writer it had a strange fascination. The actual peril of the position; the necessity of coolness in head and eye; the uncertainty how far this could be relied upon, was so startling, so vivid when the actual time came, as to force a feeling of absolute security upon the mind! Never did he feel more certain of his own powers than when hanging like a spread-eagle against the face of that rock twenty-six hundred feet above the plains.

It is a good stretch, but does not require very long legs to do it. One toe, no more, the right one on a knob of rock; the other foot feeling for those four inches of scrub wood; both hands overhead grasping the rope; and the strangest bird's-eye view between one's legs that featherless biped could wish for. It did not do to look too long. Another pull up is in front, along a ridge like the previous two, but narrower again, which runs up to the Neck, the rope your companion all the way; and then you can at last sit down in perfect safety. This is the 'Neck,' which the aneroïd gave as three hundred and forty feet above the 'Shoulder.' It forms an irregular plateau partly round the 'Head,' some six or eight feet broad, and quite flat. On it is a carpet of rough grass and 'everlastings,' protected from the wind and rain by the overhanging mass of rock, which is the 'Head,' formed of irregularly shaped rock, forty feet in height, nearly round, and which contains what there is of the brains of Pieter Both.

A notch in one side allows the rope which has been already passed over, to rest without fear of slipping; and depending from this is a short rope-ladder, hanging quite clear of everything over the rim of the Neck. Its half-dozen rungs put the rope between your fingers; and in less time than it takes to write it you are on the old fellow's brainpan, the keen air racing past, with no more harm done than a few 'barked' knuckles, and a queer growing feeling in one's head of utter loneliness. Nothing but space all round; blue sky; white scudding clouds quite close, which turn one giddy; for it seems to be that we on our little plateau are racing past the clouds, borne noiselessly, interminably, flung on some tiny planet whirling around an endless orbit. There was another feeling to confess to, suggested by that thin white rope creeping and disappearing over the bare edge—suppose it

broke, or was cut or frayed through! It was our sole connecting link with home and life and dinner. How hungry we should be if anything were to happen to that rope! how thirsty! how cold in the chill night! how wet in the company of those drifting clouds! Insensibly, one fell to calculating which was the fattest for to-morrow's meal.

From our airy resting-place, the whole circumference of Mauritius, with a small exception, can be traced. From its height everything below is strangely dwarfed. Port-Louis as a town is barely visible; the harbour, which is nearly two miles in length, is a mere strip of water; moving objects are as much obliterated as if the land below was a printed map; sounds there are none, absolute silence, broken only by the whistle of the wind. In Mauritius, there is a paucity of animal life even in the valleys; it is possible to walk for miles without hearing a bird's note. On Pieter Both are no birds—even the lizards don't attempt him. Now and again a tropic bird, the *Poile en queue* of the French, sails past, screaming his news from the sea beyond. One by one our party gained the top, each one as he pulled himself over the edge lying down for breath. Our feet, innocent of shoe-leather, had lost some of their own, and more than one pair shewed signs of rough usage. But what were a few scars to the triumph of sitting perched on Pieter Both—the dear old Peter Both of childhood's picture-book.

As the party met and got their breath, tongues were unloosed, and the serious concentrated look that had sat on most faces hitherto, melted under the influence of mutual congratulations. Eleven in all, without counting Deebie and an assistant Indian, were gathered on the 'Head;' sitting, standing, lying on that patch of black soil which Claude Penthe spoke of for the first time nearly ninety years ago. The sheet of lead for inscribing the names of the 'visitors' was there, but of a tin box which was known to have been left, not a trace remains; some passing hurricane has probably spirited it away. The descent was safely made, though it is perhaps more awkward than the going up. Some photographs were taken from the 'Shoulder,' on so narrow a shelf that it was necessary to place a man at each leg of the tripod to prevent the camera toppling over; a final glass drained to the health of the old gray rock; and about four o'clock in the afternoon, La Laura and the pleasant sugar-cane fields were reached without a single mishap.

It may be thought worthy to record the names of this the largest party that ever made the ascent of Pieter Both. He is not likely to be visited again for some time to come, and long before this account appears, the whole eleven will be scattered far and wide—miles distant from that strange, eerie trysting-place. They are: Lieutenants MacIlwaine, Creswell, Bayly, and Midshipman Elwes of H.M.S. *Undaunted*, Major Anderson, Captain Bond, Lieutenants Phillips, Hammans, Sillery, and Saunders of H.M. 32d Regiment; and Captain Montague, Brigade Major. A pole was rigged up, and the Union-Jack hoisted and left flying, as a remembrance of the day, and as a sign to the many watchers in town that the ascent had been successful. These told its afterwards that through a telescope our movements had been perfectly traced; the passage of the 'Saddle Rock,' where the

rope stretches round the face of the mountain opposite Port-Louis, having caused the strongest sensation, as our bodies, dwarfed to the size of spiders, came out against the sky. W. E. M.

THE LAST OF THE HADDONS.

CHAPTER XXXIV.—TWO LETTERS.

AFTER arranging everything else, I sat down to write my farewell letters, commencing with one to Philip, and being very careful to allow no tears to fall upon the paper.

'DEAR PHILIP—I ought to have told you what I am about to write, when I bade you farewell this morning; but I wanted our parting to be, as it was, a happy one. Had I had the courage to tell you, instead of writing, I know you would not have yielded to me; perhaps you would not even have listened. When you read this, your blame cannot reach me; and until you can forgive me, we shall not meet again. Dear Philip, I cannot be your wife. I must bear all the blame of not making it known to you until now, as best I may; but I cannot marry you. The conviction has only become absolutely clear to me since you so much pressed me to make no longer delay.'

'Ah Philip, may you never suspect *how* it was made clear to me! I mentally ejaculated, breaking down for a few moments in an agony of suffering. But I sternly called myself to order, and was presently bending to my task again.

'I have chosen a different life, and only delay explaining what that life is, and why it now seems more congenial to me than being a wife' (to the man who loves another woman, was in my thoughts), 'until you have quite forgiven me. Indeed, it is the belief that that time will come, which gives me the courage to act as I am doing. But there is one way, and only one, by which you can prove that your forgiveness is sincere, and give me the comfort of believing that I have not shadowed your life. If I hear that you are able, by-and-by, to find some other woman more appreciative than I'—

I dropped the pen, and bowed my face upon my hands again in the bitterness of grief. 'More appreciative than I!' But I forced myself to my task again, and left the words as they were. If he once suspected that it was a sacrifice, would he accept it, however willingly it were offered? Loved he not honour more? Besides, this must be a letter which he could shew to Lilian; at anyrate by-and-by, and no suspicion of the truth must reach her.

'If that time comes, and I earnestly desire that it may, I shall be able perhaps to justify myself to my own conscience. I know only one whom I should consider worthy of you, one not to be easily won, but worth the labour of a lifetime to win. I dare not name her—I am almost afraid to write of her. But, dear Philip, if it could be—if she whom I love above all other women could be in time won to make up to you for the loss of me, I shall have

nothing to regret. I can only repeat that nothing but the knowledge of your happiness will give me the courage to hope for your forgiveness and to meet you again. Meantime, I can only beg you to try to believe in your loving sister
MARTY.

I read the letter through with not a little dissatisfaction, though I could not see how to amend it. It had been so difficult to say sufficient to serve the purpose without giving some clue to the truth. I could not help a little bitter smile at the reflection how very different would his judgment of that letter have been if he loved me! How scornfully would such excuses have been swept away if I had been the woman he loved! How angrily he would have taunted me for being what in fact I should have been had I deliberately wronged him! Alas! I was writing to a man whose love for me was dead, and who yet desired to act honourably towards me. He would not be inclined to be unkindly critical about my manner of setting him free, if I could only contrive to make him believe that I wished to do so.

To Lilian I wrote in a somewhat more jaunty strain. Better that my letter should seem to be written even slightly than sadly. But I had been so little accustomed to this kind of diplomacy, that I was astonished as well as saddened to find how close one might keep to the truth in the letter, whilst departing so far from it in the spirit. Neither to Philip nor to Lilian did I dare to tell the truth, and yet I could write all this without appearing to depart from it! Fortunately this kind of diplomacy blinds none who are not inclined to be blinded.

MY DEAR SISTER—You must try not to be very angry with me for running away without bidding you farewell in some better fashion than this. But by acting as I am doing, I avoid your scoldings, or perhaps I had better say pleadings. It is really no use arguing with a person like me, as I think you have discovered before now. And as I have very deliberately made up my mind, there really is nothing to be done. You have, I know, been a great deal puzzled of late to account for the change which you have perceived in me, and as I could not explain it without shocking you, I have waited to get out of the way first. Dear Lilian, I was not in jest when I told you I had begun to suspect that marriage is not my vocation; and I have at length come to the conclusion to obey my instincts, which tend in another direction. I believe that you will in time agree with me in thinking that I have done for the best; though I fear you will be very angry with me at first, not being able to see all my motives. Please get dear Mrs. Tipper to ask Philip to come down sometimes, and try what you both can do to cheer and comfort him. He knows so few people, and he will be so terribly lonely. I must trust that in time he will come to acknowledge that I may not be altogether so selfish and inconsiderate as I must appear to be to him and to all of you in the first moments of disappointment. I will say this much to you, dear sister—I feel, and the feeling is not altogether of sudden growth, that I am too old for Philip; or

perhaps I ought rather to say he is too young for me. At anyrate I have chosen a different life, and only wait until I feel sure that you have all forgiven me, to prove to you that I am happy in it. Say all that is kind to dear Mrs. Tipper for me. I must hope to be able to prove my gratitude to her by-and-by. Ah Lilian, my sister, if I dared to write about my hopes! I can only say that if Philip is in time fortunate enough to find some good woman willing to make up for the past to him, my gratitude towards her will be very great. I am going away because I think it is best for us all that I should go, and because the persuasions which your love might prompt you to use would not induce me to alter my decision. I have begged Philip to try to believe in a sister's love, and I ask you too, dear Lilian, to believe in the love of your sister
MARTY.

Little as I was satisfied with these two letters, I knew that I should not be able to improve upon them, however much I might try to do so. The fault was that I could not be explicit; and that would be apparent to myself if not to the others, however elegantly my sentences might be turned.

I put the letters aside until they should be required, and then lay down for a few hours' rest. Thank God it *was* rest! I fell into a deep dreamless sleep, and only awoke when Becky came to call me in the morning. There was still the same expression in her face, half sorrow, half pity, as though she saw cause for both as she looked at me.

'Now, Becky, you must not look at me in that way, to begin with. I am going to depend a great deal upon you, and it will not do to let your face tell all you are thinking about, as it is doing now.'

'I can't help it shewing, because— O Miss Haddon, dear, I know you are not so happy as you pretend to be—I know't! And it's ever so much worse to see you look like that, than as if you were crying and sobbing!'

I saw that it was no use trying to throw dust into Becky's eyes.

'Well, suppose I am not very happy, Becky, and suppose I have some good reason for pretending, as you call it, to be so. Suppose that I do not wish to grieve your dear old mistress and Miss Lilian by allowing them to see that I am unhappy. It is of great importance that I should appear cheerful to-day; and I want you to help me as much as possible to make them think that I am, for—Becky, I am going away, and they must not know I am going.'

Becky threw up her hands. 'Going away!'

'Hush! No one but you must know that I am going.'

She was on the carpet clinging to my feet. 'Take me with you; do, pray, take me, Miss Haddon, dear; no one will ever love you better, and I can't stay without you!'

I made her get up; and taking her two hands in mine, murmured in a broken voice: 'Try to trust me, Becky. If I could take you with me, it would be very selfish of me to do so. It is your duty to stay here, as it is my duty to go. But I shall not be so far away as I wish them to believe I am—recollect, as I *wish* them to believe; and I may be able to see you frequently, if I find that I can trust you to keep my secret.'

'You may trust me, Miss.'

'I am sure I can, or I would not ask you to help me. I must not break down this last day, Becky; for the sake of others as well as myself, I must not.'

She dried her eyes; and presently the expression I wanted came into her face.

'Please forgive me; I won't shew it any more; and I will do anything you tell me.'

'First, and above all, you must earnestly do what you can to assist me to make it appear that I am feeling neither sorrow nor anger to-day, Becky.'

'I will,' she replied, simply and honestly.

'And next, I want you to contrive to carry that small portmanteau into the wood for me at dusk this evening, when some one will meet you, and bring it to me. You must contrive it so that no one will know that you have helped me. The best time for you to take it will be whilst the ladies are at tea. If you take in tea at the usual time, precisely at seven, you would have a spare half hour, which would be time enough. Slip out the back way, and carry it anyway. I cannot take it myself, as there must be no good-bye.'

'Very well, Miss. This one?'

'Yes. It is not too heavy for you, I hope?'

'O no, Miss; it is not that;'; lugubriously.

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'No, Miss Haddon, dear; I won't forget, when I'm down-stairs.'

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Whenever she entered the room there was the same grin on her face. In fact, in her anxiety to be loyal to me, she was overacting her part, and it culminated, when, after looking at her in some astonishment, Lillian inquired if she had received any good news.

'Yes—no. It's only because I'm so happy to-day, Miss,' returned Becky, with a still more alarming distension of her mouth.

I think Mrs Tipper had occasion afterwards to congratulate herself upon Becky's 'happy days' not coming very frequently.

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I did not allow Lillian to make her escape afterwards. Famously decided that there was to be no French history to-day, and that she and I were to spend the morning together in the old delightful fashion of the past. Philip was not coming for a day or two; and we would go over some of the old work, which had been somewhat neglected of late, with the exception of music and singing. A little

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I replied with a tender kiss; then lightly said: 'I really feel quite kissably inclined this afternoon!' turning to my dear old friend, and giving her two or three hearty good-bye kisses, then back again to Lillian with a last hug.

'And now, I must run off again;' adding as I reached the door: 'Do not wait tea for me. I shall not be able to get back by then.'

'To town! Mary?' asked Lillian. 'And I am not to be permitted to accompany you again. I feel sure there must be something very mysterious going on!'

But she was smiling, and I believe that both she and her aunt were now quite at ease about it, having made up their minds that their first surmise—that I was preparing some pretty surprise for them—was a correct one.

I ran up to my room, hastily indicated to Becky where she was to find the two letters in a couple of hours' time, put on my bonnet and cloak, gave a quiet embrace and warning look to the faithful girl, sobbing under her breath, then went downstairs again. I dared not venture to go into the little parlour for a last word, lest some tender speech of Lilius's should cause me to break down; so little would do it just now, when every nerve was stretched to its utmost tension.

I passed swiftly out, and down the garden path, only venturing to give one look back to nod and kiss my hand, when I reached the gate, and then sped on as fast as my feet would carry me. I was just turning into the lane which led towards the stile, when suddenly I found myself face to face with Robert Wentworth.

'Where are you going to at that rate, Mary?'

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I looked down at my hand in a dazed kind of way, trying to recollect what had happened to it. 'I don't know. Good-bye.'

'Mary! is there anything to be done which a brother might do for you?' he asked in a low troubled voice.

I tried to think what brothers could do, and what there was to be done for me, then shook my head.

'For old friendship's sake, do treat me as a brother now, Mary!'

His very evident perturbation had the good effect of making me rally my scattered wits, and I was so far like myself again as to reply: 'The only—only way in which you can help me just now is to let me go without any further questioning.'

He stood aside at once without a word, and I passed on. But I had no sooner done so than my conscience smote me. Was *this* the way to part from him—the one above all others so true to me? I turned back to where he remained standing, laid my hand for a moment upon his arm, and said: 'Please forgive my rudeness, Robert; and believe that if there were anything for a brother to do, I would ask you to do it. And perhaps you *will* be able to help me presently in trying to convince them that, however blamable I may at first appear, I have acted, as I believe, for the best.'

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'God keep you, Mary!'

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with the same facility in all; a man must have had some experience before he can do it.

A slight sketch of this organ will perhaps make the subject clearer. From the breast there rises to the middle of the neck the passage for the air between the lungs and the mouth; at one end it is divided into numerous branches, called the bronchial tubes; at the upper end, like the capital of a column, is seen the larynx, resembling an angular box; strong cartilages make it very resistant; and the interior is lined with a mucous membrane forming folds, named the vocal lips. These separate, lengthen, or shorten in the formation of various sounds. The largest of the four cartilages rises in an annular form, and protects the whole structure. It is but slightly shewn in the neck of the female, but strongly marked in the man, and is popularly called Adam's-apple. Like everything else, the larynx presents individual differences. A fine development is an indication of a powerful voice. As the child grows up, there is a sudden alteration and increase of size; but it always remains smaller in the woman than in the man; the angles are less sharp, the muscles weaker, the cartilages thinner and more supple, which accounts for the sharp treble notes in their voices.

Singing demands a different kind of activity in the organs from speaking. In society, where education requires a submission to rule, singing belongs to the domain of art; but in a primitive state all nations have their songs. Musical rhythm drives away weariness, lessens fatigue, detaches the mind from the painful realities of life, and braces up the courage to meet danger. Soldiers march to their war-songs; the labourer rests, listening to a joyous carol. In the solitary chamber, the needle-woman accompanies her work with some love-ditty; and in divine worship the heart is raised above earthly things by the solemn chant.

A strong physical constitution and a perfect regularity in the functions of the organs used in singing, are inappreciable advantages. They should be capable of rendering an inspiration short and easy, the expiration slow and prolonged; there is a struggle between retaining and releasing the air, and with the well-endowed artiste the larynx preserves its position, notwithstanding the great variety of sounds which it emits. But the evolutions of the parts are multiplied, the vocal lips vibrate, and the configuration of the cavity modifies the sounds which are formed in the glottis, and determine the tone of the voice. The most energetic efforts of the will cannot change this tone in any sensible manner. Professors injure their pupils by prescribing the position of the mouth, from which perhaps they themselves derive an advantage.

It is interesting to watch the play of the organs by the help of the laryngoscope, and see the changes which succeed one another in the low and high notes. At the moment when the sound issues, the glottis is exactly closed; then the orifice becomes a very long figure, pointed at the two extremities. As the sound rises, the vocal lips approach each other, and seem to divide the orifice into two parts; then as the highest notes are sounded, there is but a slit the width of a line. The vocal lips change like the glottis; they stretch out, harden, thicken, and vibrate more and more as the voice rises. Women, who have a smaller larynx and shorter vocal lips, can sing higher notes

than men, with a tone less powerful, but sweeter, more uniform, and melodious.

The ordinary limits of the voice comprehend about two octaves of the musical scale: it can easily be increased to two and a half; but some reach the very exceptional range of three, and three and a half. Thus at the commencement of this century, Catalani astonished every one who heard her, as a sort of prodigy. Suppleness and intensity may be acquired by practice, as has been proved in the case of many singers: the voice of Marie Garcia was harsh, but it became at last the delicious one of Madame Malibran. In general, the natural gift is manifested without culture; the child endowed with this great charm warbles like a bird for amusement; a lover of art passes by, listens with surprise, and promises glory and fortune to the rival of the lark. Thus the famous Rubini won his triumphs. Occasionally the singer has in a moment lost all power, and an enchanting voice will disappear never to return; such a misfortune befell Cornelia Falcon.

Those who have watched the formation of vowels and consonants can describe very precisely the positions which the lips, tongue, and palate take in articulation. Yet almost identical sounds can be produced with different positions. As we all know, the teeth are a great help to pronunciation, but a person who has lost all his teeth can modify the play of the lips and tongue and express himself intelligibly. Actors imitate the voice of public characters so as to make the illusion complete. The ventriloquist can make his voice issue as if from a cavern. When misfortune has deprived a man of the whole or part of his tongue, he can still hold a conversation, though the sounds are never particularly agreeable. All this shews that there is nothing absolute in the actions which form words, though in general the same organs play similar parts. Those who were born deaf have ceased to be dumb by interpreting the movements of the mouth with wonderful certainty: they guess the words of the speaker instead of hearing them, and so learn to speak by imitation, their speaking, however, being seldom well modulated. There are now several institutions where the poor creatures who have been deprived of one of their senses can acquire a means of communicating with their companions without the tedious intervention of writing. The master indicates to the child how he must open his mouth, place his tongue and lips; he then draws the pupil's hand over his own larynx, so that he may feel the movement. Those who, like the writer, have seen this reading from the lips, will be struck with the surprising delicacy of the impressions made on the eye which has been thus cultivated.

In comparison with the human voice, that of animals seems poor indeed. The barking of the dog, the mewling of the cat, the bleating of sheep, cannot be called language, in the proper sense. Yet the larynx of these creatures is on the same plan as that of man. Among monkeys the resemblance is perfect. To all appearance the impossibility of speaking is due to the formation of the lips and tongue. In 1715 Leibnitz announced to the French Academy that he had met with a common peasant's dog that could repeat thirty words after its master. In spite of such an authority, we must always say when we most admire the intelligence of this faithful companion: 'He only wants words.'

So well endowed with memory, affection, and intelligence, he can only express his joy by sharp, short expirations of air through the glottis. Howling is a prolonged note in the pharynx, excited by deep grief or pain. Yet they in common with many other animals can communicate with each other in a marvellous manner when they wish to organise an expedition. A dead bullock was lying in a waste far from all habitations, when a solitary dog, attracted by the smell, came and fed upon it; immediately he returned to the village and called together his acquaintances. In less than an hour the bones were picked clean by the troop.

Opportunities for studying the language of wild animals are rare: they fly from man, and when in captivity they become nearly silent, only uttering a few cries or murmurs. Travellers have sometimes been able to watch the graceful movements of the smaller African apes. Living in the branches of trees, they descend with great prudence. An old male, who is the chief, climbs to the top and looks all around; if satisfied, he utters guttural sounds to tranquillise his band; but if he perceive danger, there is a special cry, an advertisement which does not deceive, and immediately they all disperse. On one occasion a naturalist watched a solitary monkey as he discovered an orange-tree laden with fruit. Without returning, he uttered short cries; his companions understood the signal, and in a moment they were collected under the tree, only too happy to share its beautiful fruit. Some kinds possess a curious appendage, a sort of aërial pouch, which opens into the interior of the larynx and makes a tremendous sound. These howling apes, also called *Stentor*, inhabit the deepest forests of the New World; and their cries, according to Humboldt, may be heard at the distance of one or two miles.

If it be ever possible to observe the play of the larynx of animals during the emission of sounds, the subject will be a very curious one. The difficulty seems almost insurmountable, as their goodwill must be enlisted; yet M. Mandl, full of confidence in his use of the laryngoscope, does not despair. After man, among animated nature, the birds occupy the highest rank in nature's concert; they make the woods, the gardens, and the fields resound with their merry warbles. Cuvier discovered the exact place from which their note issues. They possess a double larynx, the one creating the sounds, the other rescounding them: naturalists call the apparatus a drum. Thus two lips form the vocal cords, which are stretched or relaxed by a very complicated action of the muscles. This accounts for the immense variety of sounds among birds, replying to the diversity in the structure of the larynx.

The greater number of small birds have cries of joy or fear, appeals for help, cries of war. All these explosions of voice borrow the sounds of vowels and consonants, and shew how easy and natural is articulation among them. Those species which are distinguished as song-birds have a very complicated vocal apparatus. For the quality of tone, power, brilliancy, and sweetness, the nightingale stands unrivalled; yet it does not acquire this talent without long practice, the young ones being generally mediocre. The parrots which live in large numbers under the brightest suns, have a love for chattering which captivity does not lessen. Atten-

tive to every voice and noise, they imitate them with extraordinary facility; and the phenomenon of their articulating words is still unexplained. It is supposed that there is a peculiar action in the upper larynx. As a rule, they attach no meaning to what they say; but there are exceptions. When very intelligent and well instructed, these birds—such as Mr Truefitt's late parrot, an account of which appeared in this *Journal* in 1874—can give a suitable answer to certain questions.

Our notes on this interesting study come to a close. Man is well served by his voice; words are the necessity of every-day life; singing is its pleasure and recreation, whether the performers are human beings or birds.

FOX-HUNTING ON THE MOUNTAINS OF SCOTLAND.

THE light of an almost full moon was struggling with the first faint glimmer of dawn one morning late in February as I sprang out of bed and looked through my window. I could see a few fleecy clouds racing across that luminary; and away to the north-east lay a dark bank, breaking of the direction taken by the storm which I had heard at intervals during the night; but otherwise the sky was clear and gave promise of at least a few hours' respite from the almost ceaseless rain of the previous two months. Such being the case, I lost no time in dressing and in calling my companion; and before another day had fairly begun, we were passing through the fresh clear air on our way to the hill, accompanied by two couples of friends, while an irresistible terrier who would not be denied found its way to its owner's heels before we had gone many hundred yards.

Foxes in the Highlands are held in very different estimation from the same animal farther south. Death, meted out with all weapons and under all circumstances, is their lot whenever found; and few acts are considered more meritorious or more deserving of public thanks than the destruction of a vixen and her cubs. Little fault can be found with such a state of affairs when it is remembered that hunting is impossible, and that otherwise foxes would increase to such an extent as not only to do great damage to game, but to become a serious tax upon the sheep-farmer, especially during the spring, when quantities of lambs fall victims even under present circumstances. The great extent of many Highland properties and the small number of keepers employed, render it impossible for them to keep the foxes under without assistance; and the result has been the installation of a regular district fox-hunter, whose one employment is to go about from farm to farm accompanied by his hounds and terriers, and kill foxes, on consideration of receiving a toll of so much per score of sheep, as well as free quarters for as long as he chooses to stay.

Such was my companion on this occasion. He deserves, however, a more than general notice. To watch him as he sat over-night by the kitchen-fire, his chin almost resting on his knees, no one would guess, from his bent and stiffened appearance and long white hair, that they were looking at the best hill-man within a radius of fifty miles; a man who on three different occasions had ventured alone on the outlying heights during the worst

of a wild snow-storm in search of missing shepherds, and who had succeeded in bringing two of them home alive, despite having to carry one for nearly five miles through drifts out of which no other man in the glen would have had a chance of extricating himself. Although now near sixty years of age, time did not seem to have had any effect upon his physical powers; and while he grumbled and declared himself worn out and unfit for his position, entailing as it did an immense amount of fatigue and hardship, it was well known that the man who could live alongside of old Ian Cameron when once his hounds had settled down to a fox, must not only be of sound wind and limb, but more active than nine-tenths of the young Highlanders in the district.

The hounds also deserve some notice before I enter upon the doings of the day. They were small, very powerfully built animals, with heads and frames much resembling the old Southern hound; and possessing a grand bell-like note; but far too slow to come up to the modern idea of a fox-hound. Indeed, except on some very rare occasions, when a fox had been caught unawares or, as it is usually termed, 'chopped,' neither they nor their immediate ancestors had ever killed one without assistance. Ian had, he told me, first got the strain from the late Lord Eglinton nearly fifty years ago, and had kept it pure from that day to this. It was, however, in terriers that the old man excelled. Talk of the prize-winners of the so-called Skye breed at the dog-shows of the present day! I very much doubt if Ian would have accepted one of them as a gift, while his specimens would no doubt have been contemptuously ignored by any well-regulated judging mind. Long-bodied, short-legged, powerful little animals they were, with rough coarse coats of the thickest of thick hair, each of them able and willing to bolt or half kill a fox single-handed. Their ancestors had originally been brought from the island of Barra, where, in common with all the western islands, the breed supposed to be confined to Skye is found of the utmost purity; and they were as perfect representatives of their class as it would be possible to find anywhere.

Their owner had arrived two days previously at the house of a large sheep-farmer with whom I was staying; and as I knew there were several foxes frequenting the cairns among the high hills, I had arranged to accompany him on this and on subsequent occasions; and I may add, that for those who both can and will run for miles over the wild tops of our Highland hills, and who care for hunting and seeing hounds working when separated from the excitement of hard riding, there are tamer amusements than accompanying a professional fox-hunter on his rounds. On this occasion we had some miles to go before there was much chance of falling in with the object of our search. The wily tods rarely came down to the low ground, where the house and arable portion of the farm were situated, preferring to keep among the almost inaccessible boulders and rocks which strewed the surface of many acres on the hill-tops, from whence during the breeding season they made nightly raids against the lambs for miles around. In winter, however, the snow drove them down somewhat, and they took up their quarters in such low-lying cairns as contained rabbits, which, with an

occasional white hare, seem to form their principal food, until the advent of spring brings them more easily captured and more toothsome victims. They by no means, however, confined themselves to any one spot, but moved about from cairn to cairn; and it was in the hope of getting on the line of some such prowler and marking him to ground that we were making our present expedition. A finer morning for hunting of any kind it would have been impossible to conceive: a warm south-westerly breeze was blowing, and the air felt more like May than February, while the few remaining clouds were rapidly disappearing, and the newly-risen sun, as yet concealed from us by the intervening mountains, was sparkling on the snow-covered summits of the hills, or pouring down through the glens in long rays of golden light on to the many lochs and woods which, intermingled with cultivated fields, formed a belt of lowlands at our feet stretching to the Western Ocean.

For nearly two hours we pursued our way, mounting higher and higher, until we reached a broad glen, shut in by very high hills, on which were some cairns much affected by the foxes. During this time the old fox-hunter had kept up a continuous stream of talk, quite regardless of the severity of the ascent, which was such in places as to render me glad of the excuse afforded by the glorious view below, for a momentary rest. His theme was foxes, and it may be imagined that after an experience of nearly fifty years he had a good deal to say worth listening to on the subject. One anecdote of a cub I remember. He had been asked by some southern laird to preserve any cubs he could catch, and to send them south to him for turning out; and one spring he succeeded in getting three. They were too young at the time of capture to bear the long journey; but after two months he put the three into a wooden box, nailed it down, and took it in a cart to the pier, some twelve miles distant, where the steamer by which he was going to send them called. A gentleman he met there told him that unless he wished the cubs to die of suffocation he had better take the top of the box off and bore breathing-holes in it; and while doing so one of them made its escape. It was dark at the time; and after a short pursuit he had to give it up as hopeless, and returned home next morning after sending off the remaining two. To his astonishment he found the missing cub comfortably ensconced in its accustomed corner, and was told by his wife that at eleven the previous evening, just three hours after the little animal had made its escape, she had heard something scratching at the door, and on opening it found the cub, much travel-stained and wet, and evidently very tired, but delighted at reaching home again. How it managed to find its way on a dark wet night over a road it had never seen, and had only once traversed shut up in a box at the bottom of a cart, is one of the mysteries of instinct; a faculty which ought rather to be ranked with reason.

On entering the glen Ian commenced to cast his hounds, which had hitherto kept to heel, from side to side; and we had hardly gone a hundred yards before they began to get busy, and in a few minutes it was evident they had got on the line of a fox. Knowing the ground well, we watched them without moving for a little while, until indeed we felt

no doubt as to the particular cairn their quarry had been making for, and then, as his line had by no means been a direct one, we had ample time to get above the hounds and, while making our own way as direct as possible, watch them as they followed him along the mountain-side. It was pleasant to see them all working together, making a cast here or a turn there, as they puzzled out the cold scent, their rich full note every now and again reaching us as one or other of them was able to 'speak' to it. Winding in and out among the small corries, but ever rising higher and higher, the tiny pack at last headed direct for the cairn, close to which we had arrived several minutes before; and whether the scent was fresher, or they were encouraged by again seeing us, every hound joined in the musical chorus.

We were standing on a small eminence close by, and as the rich bell-like notes sounded through the clear air of the mountain-tops, an old dog-fox with a white-tipped brush stole out, and before Ian could get his gun up, was well under weigh. I am glad to say that shooting straight did not form one of the old man's accomplishments, and I saw his slugs flatten themselves into great white blotches on the face of a big black rock a couple of yards behind the tod. At the same instant, with a yell which brought the hounds to my heels, I rushed after it, and only waiting long enough to see them racing away in full view, I made for the top of the hill, now not many yards distant. Ian, notwithstanding old age and white hairs, was already before me, and I had to run hard before I could get on level terms with him. The chase was for the time out of sight though not out of hearing; but after a smart run of half an hour's duration we came to a jutting perpendicular precipice, forming the angle where a smaller glen joined the main one, and far below us we could see the hounds racing without a check, while a careful search of the probable line of the tod revealed him making the best of his way to a very strong cairn on the hill exactly opposite to us. Feeling pretty certain that as he had got his mark in that direction, he would make it his point, we sat down on the brink of the precipice and watched both pursuers and pursued. The latter was evidently gaining ground, and seemed to be aware of the fact, as he was certainly not distressing himself; but the hounds were running so that literally a sheet would have covered them, and were hunting his line without even a momentary divergence; so that, however well this strong hill-fox might have proved, he would have found it no easy matter to run them out of scent. Five minutes across the glen, and another five up the opposite hill, sufficed, however, to bring him close to his stronghold; and secure in the prospect of immediate safety, he had the coolness to turn round and watch his pursuers as they toiled up behind him; disappearing from our view the moment after behind the great rock and boulders which everywhere lay scattered around.

As soon as he did so, we got up and made the best of our way across, finding the hounds mounting guard on the rock under which he had disappeared. The cairn he had taken refuge in was the strongest and largest on the property. A chaotic mass of loose boulders were strewn one above another among enormous masses of rock over an extent of some four acres; and so rough was the walking

that it was exceedingly difficult if not absolutely dangerous to attempt to cross it. Rabbits inhabited it by the thousand, and the whole mass was connected more or less by passages beneath the surface. Indeed there was nothing to prevent a fox from taking the ground on one side and bolting perhaps two hundred yards off on the other; and Ian's first care on arriving was to take his hounds round outside, to make sure that it had not done so. Satisfied on this point, he chose a position on one of the biggest rocks, and after putting his terrier in he retired there, in readiness to fire if the fox bolted. I remained down below, to follow as far as practicable the progress of the terrier. The little animal well knew its work, and plunged in under the rock with the utmost keenness. A second after, a yelp or two told that it could feel the hot scent, if it had not reached the fox; but the yelps grew fainter and fainter, and at last died away. I kept moving about among the boulders, listening at the rabbit-burrows and crevices of the rocks, and at last I distinguished the snarl of the terrier, followed at intervals by distant sounds of tearing and scratching. The combat, however, if combat it was, was taking place very deep down, and it was impossible to distinguish what was going on. By degrees also, even these sounds ceased; and as, after waiting for more than half an hour, they were not renewed, Ian joined me, and ineffectually called and whistled for his dog.

After persevering in trying to make out its position for some time, we at length desisted; and as it was necessary for one of us to go for assistance in the shape of other terriers and more men, I volunteered to undertake the task, leaving Ian to guard the cairn during my absence. A sharp run of an hour took me to the farmhouse, where the news of our having got a fox in the Gray Rock Cairn soon spread; and by the time I had bolted a few mouthfuls of breakfast, and got some grub put up for Ian, I found half-a-dozen men and three times that number of terriers and collies in readiness to accompany me back. A little over two hours saw us at the scene of action; and we heard that nothing had occurred during my absence, except that Ian felt pretty confident that he had once distinguished the sound of his terrier scurrying. We had brought four others of his up with us, and these he at once turned in; while every one who owned a dog of the breed put it into some part of the cairn, and then awaited the result; the collies meanwhile contemplating the proceedings, sitting on their haunches with their ears half cocked and their heads a little on one side; pictures of canine wisdom. The terriers had not been in many minutes before a regular chorus of yelping commenced, followed by the appearance of one or two of the less courageous with their tails well tucked in between their legs, only to receive execrations in guttural Gaelic from their owners. We now set to work to move some of the smaller boulders; and at the end of about an hour's hard work, we reached the scene of the conflict, and found the fox which we had marked to ground, and another, quite dead.

Great were the rejoicings over the death of these two of the shepherds' enemies, and loud the praises each man bestowed on his own terrier, if he was fortunate enough to possess one. In real truth, however, it was those belonging to Ian which had done the work, as they were put in

first, and not more than three could have reached the fox at one time.

On several other occasions I was out on such-like expeditions from dawn to an hour or two after dark, during which time we killed six foxes, one falling a victim to Ian's gun, and the rest meeting their death in fair fight with one or two terriers; as except on the occasion I have just related, I do not remember more than the latter number being turned in at once. We also had some capital runs with the hounds; and whatever may be the opinion of the legitimate fox-hunter, I can assure him he may have worse sport than a day on foot among our Highland hills.

W. H. D.

SMUGGLING IN ITS DROLL ASPECTS.

THE Custom-house, London, although it figures in almanacs in the list of 'places of public amusement,' is by no means a cheerful building. Situated in the extremely busy and dirty thoroughfare called Lower Thames Street, next door to Billingsgate Market, far-famed for good fish and choice language, it has few attractions for those who are not compelled by business needs to enter its portal. Here is nothing but noisy activity. Merchants' clerks, porters, car-men, and the numberless beings who form the rank and file of a vast commercial centre, elbow each other as they push through the ever swinging doors in their anxiety to get their business transacted.

Occasionally a knot of country people may be met with in the 'Long-room' staring about them in the fruitless search after anything in the shape of entertainment; but with these exceptions the place is given up to business. If these visitors were able to find their way to the Museum, they would there see much to both interest and astonish them; but this part of the building is perhaps necessarily withheld from the general public, for there seems in the busy hive so much for everybody to do, that drones in the shape of sight-seers would hardly be welcome.

Yet the Custom-house contains a museum of real curiosities—memorials of attempts at smuggling. Various causes have contributed to the decline of contrabandism as a means of livelihood, chief among which are the necessary reductions and alterations in the Customs tariff since the adoption in this country of free-trade principles. When such valuable and portable articles as watches and lace were heavily taxed, the temptation to secrete them was naturally very common. At the same period too the duty on spirits was about five times as much as its intrinsic worth, and therefore this class of goods afforded a rich harvest to the successful smuggler. Things are changed now, for lace and watches are duty free, and the tax upon spirits has been reduced considerably more than one half. Tobacco and spirits, owing perhaps to the universal demand for them, have always, above other things, met with the smuggler's particular regard; and such cases as now come before our police magistrates are generally confined to these two articles. A matter-of-fact heavy fine and confiscation of the surreptitious goods, is the usual result of conviction; and the smuggler—which our childhood's fancy painted as a brave hero fighting the myrmidons of an oppressive government in some wild cave

on the sea-shore—is quietly walked off to prison until he can pay the forfeit. 'The Smuggler's Cave' still remains; for with that clinging fondness for the traditions of past times, it is the fashion to dignify any natural crevice in our cliffs with that title; but now the modern policeman steps upon the scene, and poetical ideas vanish with the sound of his creaking contract boots.

The chief evidence of smuggling as it has existed within the present century is furnished by certain articles which have been seized from time to time, and which are now lodged in the Custom-house Museum. It is to this Museum that we now intend to direct our readers' attention, and more especially to a certain large cabinet in the corner of the room, the contents of which supply a title to this paper. The first thing which is pointed out to us is a ship's 'fender,' which we may remind our readers is a block of wood with a rope attached slung over the bows to prevent the abrasion which might be caused by contact with another vessel. This particular fender was found to be hollow, and to contain several pounds of compressed tobacco. The officer who thought of looking for the soothing weed in such a receptacle must have been an extremely 'cute individual. But here is a still more extraordinary hiding-place, and one which must have involved a journey aloft for its detection—a ship's block, the sheave or wheel of which is actually made of solid tobacco. Here is an ornamental pedestal which once adorned the corner of a captain's cabin, and would perhaps adorn it still, had it not been found gorged with contraband cigars. Another commander appears to have been a more moderate smoker, for he was content with only two pounds of cheroots, which were found inside a sham loaf on his breakfast table. Here we have a number of cigars knotted singly on a string, like the tail of a kite; these were dropped between the inner and outer timbers of a ship's side; whilst holes drilled in the ends of an egg-box furnish lodging for several more.

A broomstick does not seem at first sight to offer much room for concealment, but here is one which, accidentally broken, revealed a core of that rope-like commodity known to those who chew the weed, as 'pigtail.' Cakes of tobacco formed to fit into the sole of a boot shew another ingenious mode of disposal. But the prize for inventive talent must certainly be awarded to the clever rascal who compressed snuff into slabs, and stamped them to exactly imitate the oil-cakes on which cattle are fattened. Whether the discovery of the deception was owing to moral objections on the part of some experienced cow to chew anything stronger than cud does not transpire; but the real nature of the food was somehow ascertained, and what might have proved the staple of a lucrative trade, was transformed into the original dust from which it sprang.

The stewardess of a Jersey steamer is the next delinquent who comes before our notice. On various occasions the petticoat has been found to be a useful auxiliary to the smuggler, and the one which was taken from this lady sufficiently proves the truth of our remark, for twenty-seven pounds of tobacco were hidden in its folds. Two more garments of the same nature contained respectively eighteen and twenty pounds of cigars; whilst another, with the help of a number of fish-bladders hanging from the waistband, was charged

with several gallons of brandy. Bladders of cognac have also been found attached to a ship's keel several feet under water. It is to be presumed that the discovery of these last was not made in the Thames, the water of that river not being celebrated for its transparency. Artificial lobster-pots thrown overboard with corks attached, also afford favourite receptacles for various articles. Another stewardess, in this case belonging to a Rotterdam boat, did a little ostensible trading in pigeons. Here is the box in which they were caged, constructed with a false bottom, below which were hidden a few pounds of Chyendish. It is a question whether birds ever before so well deserved to be called *carrier* pigeons. The journey to Rotterdam is but a short one, so that although this lady did not indulge in such wholesale doings as her sister of Jersey, she worked on the principle that 'many a little makes a mickle.' Here is an apparently well-bound volume which a studious individual carried under his arm during the transaction of his daily business at one of the docks. It was found to be made of glass, moulded into the form of a book, and covered with leather. That it was a work of much spirit was proved from the fact that it was full of *saw de oie*. Another book is exhibited, the leaves of which are punched through with round holes from cover to cover, for the reception of watches.

We are told that the detection of most of these contrivances for concealing goods about the person has been due to the nervous trepidation of the delinquents themselves; an apt illustration of Hamlet's words: 'Thus conscience does make cowards of us all.' It would seem an almost impossible task to secrete one hundred and forty-seven watches in a single garment, but nevertheless one individual succeeded in doing so. Unfortunately he found a difficulty in sitting down, and the continued fatigue of keeping his feet during a long voyage so told upon his nerves, that fancying he was detected and watched, he gave himself up to justice, literally clothed in his own confusion. Here we have four tin boxes about an inch in depth and about two feet square, having a capacity of four and a half gallons, which, filled with spirit, were found hidden below the clothing in a passenger's boxes. But the latest contribution to the Museum is a small quantity of treacle-like fluid labelled 'Nicotine Poison.' This is a sample of a consignment lately received from Hamburg, and politely returned to the port of shipment, by order of the Customs Board. It is imagined that some enterprising genius had it in his mind to convert by its aid the refuse leaves of the British cabbage into Havana cigars. We have already had experience of Hamburg sherry and Hamburg butter, and doubtless the Customs Commissioners had these commodities in view when they rejected the persuasive overtures of the narcotic in question.

Besides the things which we have enumerated, there are various articles of interest in this Museum. Several curious old prints, shewing what the Custom-house was like in the days when the London suburbs were little villages, separated from the city by some miles of meadowland. It was then the practice of the Commissioners to ride or drive to their duties, and stable accommodation was therefore a necessary adjunct of the premises. Here too are shewn the dies

used when each outport had its own particular seal—this was years ago, before the telegraphs and railways had so effectually lessened their distances from London. 'Liverpool' was then a creek attached to the port of Chester; on the other hand, many towns which have now sunk into comparative insignificance, were then flourishing sea-ports of great commercial activity. Some curious records relative to the payment of officers are also well worth attention. Here we learn, by marginal notes, that certain unfortunate beings are to be deprived of their salaries, 'they being Papists;' whilst one is notified of his due because 'his wife is now or was lately a Papist.' These notes were written in the year previous to that which saw the landing of the Prince of Orange, and they form a singularly terse comment upon the state of public feeling which led to that event. The world is now nearly two hundred years older, and has grown more tolerant. We cannot say that it has become honest; but for the reasons already given, it is not likely that many additions will be made to the curiosities of Smuggling.

THE MONTH: SCIENCE AND ARTS.

The Royal Agricultural Society's *Journal*, No. 25, recently published, abounds with information likely to interest other persons as well as farmers. There is a good account of the implements exhibited at the Philadelphia Centennial Show, in which many clever contrivances are described, among them not a few shewing that Canada is by no means deficient in inventive ingenuity. Dr Voelcker in his experiments on roots explains that swedes when allowed to sprout a second time transfer two-thirds of their solid substance to their tops or leaves; and he calls attention to a series of experiments carried on in France which lead to the conclusion that 'roots mature more readily when planted closer, and often yield a heavier crop per acre, than when they are planted too widely apart.' In his chemical report the doctor exposes the trickery used in the manufacture of oil-cake, and says that he has 'considered it his duty to refer to these matters because he knows that mal-practices of cake crushers and dealers are again gradually extending all over England.' Then comes an article on the use and value of straw as food, which will surprise most readers; and next we find a Report on analysis of butter drawn up for the Board of Inland Revenue, in which the reporters state that the more butter is washed and kneaded to expel the curd the better will it be; and that 'while some of the finest and best prepared butters undergo little or no change, there is in others a gradual disappearance of the characteristic principles of butter, and a consequent assimilation to the constitution of an ordinary animal fat. This change, which appears to be due to an incipient fermentation, and is generally accompanied by the development of fungi, is probably caused either by the use of sour cream or by insufficient care in making the butter.' We only add the remark that the souring of butter is more frequently caused by

a succession of floods, and in another by a succession of droughts, it might be hard to persuade him that, generally, the former was a remarkably dry year, and the latter a remarkably wet one. The opinions of people who trust to their sensations in a question of this kind, are swayed from side to side by every change of weather. It is only by taking annual averages for many places and many years that the truth comes out.

Papers bearing on this question were read during the past session at the Royal Society, shewing that by careful observation of the periodical phenomena above mentioned, it would be possible to foretell and provide against the calamitous seasons of famine which occur in India. This would indeed be a beneficent application of physical science; but the results of observation are not yet sufficiently definite. General Strachey, F.R.S., read a paper to prove, by a negative process, that 'there has been no sufficient evidence adduced of any periodicity at all.' Thus the question remains open to further observation and argument, of which there will be no lack; but we may anticipate that a profitable direction will be given to both by the new Council appointed by the Treasury to govern the Meteorological Office. This Council comprises the Hydrographer of the Admiralty, and five Fellows of the Royal Society eminently qualified to deal with scientific questions and direct the work of the Office.

A FIJIAN TRAGEDY.

THE following sad story is correct in its details; it occurred within the writer's ken, and may serve to illustrate how English civilisation and laws affect the Fijian mind and mode of thought. About four years ago Ravuso Ioni was the principal chief of Waia, one of a group of islands the most westerly in Fiji, called the Yasawas. About that time the parvenu Fijian government had just been formed; and we planters and natives were blessed with a travesty of English laws and institutions down in the Yasawas: one of our planters was made a warden, a court-house was established, and a posse of native police sent down. It need hardly be said that these proceedings were a mystery to the natives; and even close to Levuka, the more enlightened of them could at first hardly be brought to understand the idea of any government. At all events, Ravuso troubled himself very little about the new *nata-ni-tu*, as the government was called by the natives, but carried on in the old Fijian style of his fathers. Now there was a young man in Waia who made love to all the young girls; and not content with that, he also paid his attentions to the married women. The Fijians are a jealous lot; and by-and-by a mob of angry husbands complained of this young fellow to their chief Ravuso, who, with the advice of the old men in full council, decided that this gay lover was to be butaraka-ed, or turkey tramped as we whites call it. This butaraka-ing is an institution peculiar to Fiji. The unfortunate is knocked down; and the natives dance and jump on him until he is insensible and nearly dead. A man seldom recovers thoroughly from a good, or rather a bad, butaraka-ing.

Some, doubtless, of the jealous husbands or their friends were among the party that but-

raka-ed the gay deceiver, because they carried out their orders so well that in three weeks after the young fellow died from the effects.

In the old times, most of us whites and natives would have said: 'Serve him right,' and the matter would have ended. But now there was law in the land; our warden was just appointed, and, new-broomish-like, ordered the arrest of Ravuso. After some trouble, he was coaxed to surrender, and was confined at Somo-Somo, awaiting trial. Nothing so puzzles a Fijian as the slow procedure of our English law; and poor Ravuso pined in prison. So one day he asked his *Dan* (jailers) to be allowed a walk: they accompanied him; and all sat down under a large ivi tree. After a time the chief proposed to get some ivis, and climbed the tree for the purpose. When he got to the top, he called out to his astonished guards that he was going to throw himself down headlong. 'Tell your white judge,' said he, 'that I am a chief and the son of a chief; that I can't survive the disgrace of being imprisoned like a felon; that the punishment given to the man of mine was just—he was a bad man; that I am a chief, and had a right to punish him *vaka-viti*' (after the manner of Fiji). So saying, he threw himself down, broke his back, and died shortly afterwards.

In a day or two the news of the chief's death reached Waia, and a wail went up from each little village embowered in its cocoa-nut grove, for the death of their 'Turaga,' as they call their chiefs. His wife, Lau Wai (to strike water as in fishing), and young daughter (fifteen years only) made up their minds that their chief should not go unaccompanied to Hades, but have some one to cook and look after him there. So one night they tied a rope between two trees, twisted it round their necks, and so strangled themselves after the old Fijian fashion. These people had been Christians ten years, but evidently believed in their old traditions still. Our warden was not a bad fellow, and I believe the unfortunate result of his first attempt at enforcing English law among the natives caused him many a pang.

And now the sad tale of the death of this unfortunate Waia chief and his family is told in many a Fijian hamlet, in the cool evenings, as the sun goes down under the shade of the lofty ivis and cocoa-nut trees; and the women and children hear with a thrill of the power of that mysterious *mata-ni-tu* whose action hurled a Fijian chief from his high estate, and sent him and his devoted wife and daughter prematurely before the face of their Maker.

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PREDOMINANT DELUSIONS.

SEEMING is believing! Such is an old saw, not usually called in question, and yet it is exceedingly fallacious. A great many phenomena seemingly true by the eyesight are not true at all. Ignorance and prejudice have led to very extraordinary mistakes. We speak of the sun rising and setting, because it appears to do so, but it neither sets nor rises. The earth turns in front of it like a roast turning before a fire. A conjurer will clearly shew you that he will bring any number of eggs out of an empty hat. He only brings them out of his sleeve, where they were cunningly concealed. And so on with a great many other illusions, all seemingly fair and above board, but in which we are imposed on either by our senses, or by some fallacy in reasoning. Less than two hundred years ago, courts of justice were hanging and burning thousands of old women for being witches—all on a sort of evidence which in the present day would only be laughed at. The world now knows better than believe such trash, but it took a long time to learn; and even yet this highly experienced and much complimented world occasionally falls into the most absurd crazes; or perhaps we should more correctly say, there are large numbers of tolerably educated but credulous people who with a taste for the wonderful are ever ready to believe in any kind of nonsense that turns up. These worthy individuals are, of course, not without excuse. Starting with the principle that there may be forces in nature which science has as yet failed to disclose, we should be cautious in asserting that any particular phenomenon that seems incomprehensible is a result of mere illusion or imposture. Let every mysterious demonstration, they say, be impartially inquired into. Quite correct. The misfortune, however, is, that before the matters in question have been examined impartially by the light of science, the craze gets ahead, and many persons weakly allowing themselves to be carried away by their feelings, get painfully compromised, and are by the more cool and cautious part of mankind set down as little

better than—fools. Very hard! But the warning offered is useful. If people of good standing will believe in absurdities without proper examination, they must take the consequences.

We have been led to make these remarks by a perusal of the lately issued work, *Mesmerism, Spiritualism, &c., Historically and Scientifically considered*, by Dr W. B. Carpenter. In this ably written and eminently readable small volume, the author brings to bear a long experience in scientific inquiry into the popular crazes and impostures of the last forty years, beginning with Mesmerism and Table-turning, and ending with Spiritualism in the several shapes it has assumed. We commend the book to the serious consideration of the credulous. Tracing the history of marvels of different kinds, Dr Carpenter states that, the whole has been 'a long succession of epidemic delusions, the form of which has changed from time to time, whilst their essential nature has remained the same throughout; and that the condition which underlies them all is the *subjection of the mind to a dominant idea*. There is a constitutional tendency in many minds to be seized by some strange notion which takes entire possession of them; so that all the actions of the individual "thus possessed" are results of its operation.' Placed on this footing, the Predominant Delusion, be it a belief in witchcraft, mesmerism, or spiritualism, is a kind of monomaniacal frenzy. An absurd idea has got possession of the individual, and no reasoning with him to the contrary will have any effect in driving it out. He will absolutely get out of temper if his fanciful notions are so much as questioned. Usually the monomania spreads; and the more who suffer themselves to be affected, the keener and more demonstrative does the delusion become. Certain frantic religious ferments in past and recent times have been due to nothing else than strange contagious influences, of which, after a time, when passion has subsided, all are pretty well ashamed, and fain to stifle out of disagreeable remembrance. We happen to have seen several of these prevalent crazes, droll in some respects, but very pitiable. After such mental disturbances, things, happily,

shake themselves right at last, and all goes on as usual. The fever has subsided.

Often, able and estimable men suffer themselves to be affected by the prevailing craze, and lead on others as imitators. It is now about forty years since, when by invitation to a friend's house, we were present at an evening séance in which an eminent professor at one of our universities entertained the company with what he confidently believed to be mesmeric experiments, such as sending persons to sleep, or rendering them temporarily mute by bidding them 'tie their tongue.' Here was a man skilled in a branch of physical science, but of eager temperament and with a rage for novelty, lending himself indiscreetly to certain popular delusions which had originated in the crazed fancy of a charlatan. Mesmeric experiments of this sort were for a time a favourite amusement. They reminded us of the superstition in the old legends, in which 'glamour' is said to have been cast over weak-minded individuals. This ancient glamour consisted in producing by looks and gestures a negation of self-assertion. The operator threw the patient into a kind of spell-bound or dreamy condition without any power of correct reasoning. It was the conquest of the strong and resolute will over the weak and irresolute, through the effects of a kind of jugglery.

Mesmeric sleep, as it is called, is ordinarily produced by seemingly mystic passes of the hands, and an intense concentration of looks on the eyes of the person operated upon. In it there is nothing marvellous. Dr Carpenter explains that it 'corresponds precisely in character with what is known in medicine as "hysteria coma";' the insensibility being as profound while it lasts as in the coma of narcotic poisoning or pressure on the brain; but coming on and passing off with such suddenness as to shew that it is dependent upon some transient condition of the sensorium, which, with our present knowledge, we can pretty certainly assign to a reduction in the supply of blood caused by a sort of spasmodic contraction of the blood-vessels. This explanation, on a physiological basis, considerably reduces the mystic character of those mesmeric marvels in which the late Dr Elliotson indulged at his public séances in Conduit Street. It does not, however, as we imagine, detract from the medical value that may be attached to the calming of the nervous system by what is spoken of as mesmeric sleep. Mr Braid, a practising surgeon in Manchester, ingeniously fell on the device of producing a profound mesmeric slumber by simply causing individuals to fix their gaze determinedly at a cork stuck at the top of their nose. It was not surprising that people should have been lulled by being subjected to this species of Hypnotism. Ordinary sleep may in most instances be induced by keeping the lower extremities perfectly still, and determinedly fixing attention on the act of breathing through the nostrils. Speaking from

experience, we offer this as a hint to the habitually sleepless.

In the amusing book before us, the author shews how clairvoyants have imposed on public assemblies by tricks, which could be seen through by sceptical observers. Miss Martineau, as is well known, had a profound belief in the marvels of mesmerism. This lady had a servant, J., to whom was imputed wonderful powers of clairvoyance. On one occasion, while in the mesmeric sleep, she gave 'the particulars of the wreck of a vessel, of which her cousin was one of the crew; as also of the previous loss of a boy overboard; with which particulars, it was positively affirmed by Miss Martineau, and believed by many on her authority, that the girl could not have been previously informed, as her aunt had only brought the account to the house when the séance was nearly terminated. On being asked, says Miss M., two evenings afterwards, when again in sleep, "whether she knew what she related by hearing her aunt telling the people below," J. replied: "No; I saw the place and the people themselves—like a vision." And Miss Martineau believed her.' After all, the girl was proved to be an impostor. A medical friend, on making a rigorous investigation, discovered 'unequivocally that J.'s aunt had told the whole story to her sister, in whose house Miss M. was residing, about *three hours before the séances*; and that though J. was not then in the room, the circumstances were fully discussed in her presence before she was summoned to the mesmeric performance. Thus not only was J. completely discredited as a seer, but the value of *all* testimony to such marvels was seriously lowered, when so intelligent a witness as Harriet Martineau could be so completely led astray by her prepossessions as to put forth statements as facts, which were at once upset by the careful inquiry which she ought to have made before committing herself to them.'

A preconceived determination or proneness to believe in the reality of any seeming marvel without any other evidence than the senses, goes a great way to explain the stories that are fondly cherished by the dupes of spiritualism. The error lies in taking things for granted. At one time people were all agog as to the wonders of table-turning, and it is amusing to remember how the wonder was speedily exploded by the appliances suggested by Faraday. He conclusively shewed that the operators, however honest, unconsciously exerted a muscular action, causing the table to turn in the direction previously conceived. The whole thing was a curious piece of self-deception. Dupes of spiritualistic manipulators are similarly self-deceived. They go to séances in the fond hope of seeing incomprehensible marvels by 'mediums' and table-rappers, and come away believing that all has been real, instead of being only tricks worthy or unworthy of a conjurer. Certainly, at no séance of spiritualists have the performances excelled the wonders effected by those adepts in conjuring, Maskelyne and Cooke.

Although exploded and discredited, table-turning has latterly come up in the new form of planchette, a fashionable toy alleged to be endowed with singularly mystic qualities. Consisting of a small and easily moved board, in which a pencil is stuck with the point downwards on paper or slate laid on a table, the machine is said to be

capable of answering questions put to the operator who presses on the board with his hands. No doubt, the pencil will write answers as required, but it does so only by the conscious or unconscious muscular action of the hands on the board. This weak device of pretending to get answers to questions by the agency of an inanimate piece of wood and a pencil, has been resorted to by real or sham believers in spiritualism; and we are presented with the melancholy spectacle of decent-looking ladies and gentlemen sitting gravely round a table affecting to hold a conversation with beings in the unseen world.

Just as mesmerism lost its reputation as a branch of psychology, so has spiritualism begun to be estimated at its true value. It was always very much against it, that its professors held their séances in darkened apartments, and that for the most part they took money for the display of their wonders. The thing became a trade, and so it would have continued but for the prosecution and conviction of persons who stood guilty of imposture, and of taking money under false pretences. To add to the discomfiture of trading spiritualists, their tricks have been exposed in the book, *Lights and Shadows of Spiritualism*, by D. D. Home, who, however, lets it be known that he is among the few genuine professors of the art whose operations are alleged to be beyond suspicion! As shewn by Dr Carpenter, deception is not confined to those who practise for gain. He speaks of young ladies who take pleasure in imposing on elderly persons by tricks of an ingenious kind. 'I could tell,' says he, 'the particulars, in my possession, of the detection of the imposture practised by one of the most noteworthy of these lady-mediums, in the distribution of flowers which she averred to be brought in by the "spirits" in a dark séance, fresh from the garden and wet with the dew of heaven; these flowers having really been previously collected in a basin up-stairs, and watered out of a decanter standing by—as was proved by the fact, that an inquisitive sceptic having furtively introduced into the water of the decanter a small quantity of a nearly colourless salt (ferrocyanide of potassium), its presence in the dew of the flowers was afterwards recognised by the appropriate chemical test (a per-salt of iron), which brought out "Prussian-blue."'

Other instances are presented of deceptions practised in private séances; but for these and much that illustrates the whole tenor of the delusion, we must refer to the work itself. We restrict ourselves to quoting only one, but a very pertinent remark: 'It is affirmed, such exposures *prove* nothing against the genuineness of any new manifestation. But I affirm that to any one accustomed to weigh the value of evidence, the fact that the testimony in favour of a whole series of antecedent claims has been completely upset, seriously invalidates (as I have shewn in regard to mesmeric clairvoyance) the trustworthiness of the testimony in favour of any new claimant to "occult" powers. Why should I believe the testimony of any believer in the genuineness of D's performances, when he has been obliged to admit that he has been egregiously deceived in the cases of A, B, and C?'

For this instructive and admirably written work, offering a lucid philosophical explanation of the source of Predominant Delusions, which are apt to be turned to a bad account by the designing, and

are in every sense mischievous, as conveying erroneous notions of natural phenomena, the learned author deserves the hearty thanks of the community.

W. G.

THE LAST OF THE HADDONS.

CHAPTER XXXV.—A TWELVEMONTH AFTER.

A GLORIOUS morning in early August. I was standing in a large cheerful room, from the windows of which was an extensive view of beautiful country, hill and dale, clothed with the rich ripe fullness of fruit-time, while to ear was borne 'the distant cries of reapers in the corn—all the live murmur of a summer day.'

I was attiring myself—or I ought rather to say being attired—for a wedding, attended right royally, no less than twenty handmaidens hovering about me, each eager to do something towards my adornment; and each as desirous that I should look my very best as I was myself, which is saying a great deal. Never was slave of fashion more anxious to make an effective appearance than was I on this bright August morning. But even I began to be satisfied as the process of adornment went on, and I was gradually transformed from a sober brown chrysalis into a brilliant butterfly. A bright blue silk dress, an elegant lace cloak, white bonnet with blush roses, &c. &c. Everything, be it understood, of the very best that money could buy, and made in the latest mode, there not being a sombre colour or faded shred about me. 'All new and fresh and bright, as befits a butterfly!' I ejaculated, contemplating myself with a glad smile.

And then there was the one thing—ah, I knew it now; my prayers had been answered! Even allowing for the flush of excitement, this was not the face of a twelvemonth ago smiling gaily back at me from the dressing-glass. The eyes had lost their mournfulness, the mouth had become used to smile, and the whole face was full of life and colour. 'Yes; it all matches beautifully,' I acknowledged, in smiling assent to the exclamations of my attendants. 'But I require care, you know,' as they all pressed about me; 'not a rose must be crushed. And it is to be hoped that I shall not forget that I wear a train, and spoil the effect by falling over it,' which raised a laugh amongst my handmaidens, as royal wit should. Then being pronounced 'finished,' I went out into the gallery, and descended the broad staircase (my home was one of the finest old mansions in Kent) with my train about me. In the long room I was met by Jane Osborne, who, after examining me very critically from head to foot, was graciously pleased to add her testimony to that of the rest, and pronounce that I should do. I was nevertheless obliged to call her to order in a little aside for a certain trembling of the voice and moisture in the eyes—a weakness not to be looked over in Jane Osborne.

'God bless you, Mary! By five o'clock, remember.'

I just touched her lips, since she would have it so, notwithstanding my pointing it out to her that it was not a time for sentiment; and then with her hand in mine and attended by my train, I went into the court-yard, where my carriage awaited me.

'It couldn't have been grander if it had been created out of a pumpkin!' I whispered to Jane.

She looked uneasily at me. 'Do not try to jest, Mary,' she replied anxiously.

'Why not? if I feel equal to it, you foolish person!'

'Are you equal to it, Mary?'

'Quite. If I had doubted it before, I knew when I saw myself in the glass this morning. You ought to be able to see the difference.'

'Yes,' she murmured, 'there is a difference. —You will find the flowers in the carriage, Mary.'

I stepped in, and was swiftly borne away, amidst—I had almost written a flourish of trumpets, so very loud and shrill were some of the voices shouting all sorts of good wishes after me.

I flattered myself that the effect was very telling indeed, when my equipage, with its spirited horses and coachman and footman wearing large breast-plates of flowers, drew up before the porch of the pretty little ivy-covered vale church. I was received by the beadle and pew-opener with due respect, and found that I was in very good time. The gentlemen and some of the guests were already in the vestry, said the pew-opener; and in the porch were waiting two pretty young bride's-maids, who eyed me rather curiously. They had just time to remind me that my place was with the guests inside the church, and I to reply that I preferred waiting there, when a carriage of much more modest pretensions than mine drew up, and the two I waited for stepped out.

'Mary, Mary!' ejaculated Lillian, springing towards me with outstretched arms, forgetful, as I even then had the nerve to remind her, of our finery. What would become of me if I gave way now? 'Mary, Mary!'

And no sooner had I released myself from Lillian than there was my dear old Mrs Tipper giving me a good honest hug, utterly regardless of appearances. And as to finery! she had long ceased to allow that to interfere with her love, and was not to be daunted by any such consideration now.

The little bride's-maids, who were very carefully guarding their laces and muslins, reserving themselves for the right moment, looked with much disfavour at an ebullition of feeling at the wrong point in the ceremony; and now reminded us that it was half-past eleven, and that the clergyman and the other guests had been waiting some time. At which, with a meaning look at me, Mrs Tipper put Lillian's hand into mine, and we two passed up the aisle together, whilst the dear little woman walked after us with the bride's-maids, notwithstanding their whispered protestations that it was 'wrong'—altogether wrong—and the effect was quite spoiled!

As Philip turned to meet us, I put his bride's hand into his with a smile which appeared to satisfy even him. Moreover, Robert Wentworth's face brightened, and Robert Wentworth's critical observance had been anticipated with some little anxiety.

Lillian's uncle, the father of the bride's-maids, was to 'give her away'; he looked not a little curiously at the person whose appearance seemed to cause so much sensation; but his curiosity did not affect me.

At the words, 'Who giveth this woman to be married to this man?' Major Maitland gave the necessary response; but both bride and bridegroom turned their eyes upon me, as though the gift were mine.

As soon as the ceremony was over, Philip and Lillian turned towards me; and for a few moments we three gave no thought to the *convenances*, as we clasped hands and murmured a few words meant only for each other. Then the rest of the party gathered about the bride and bridegroom, and I became conscious of the presence of others that were known to me: Philip's brother Mr Dallas, and his wife, and Mrs Trafford and her sister-in-law Mrs Chichester. Marian Trafford was gorgeously attired in what no doubt was the latest Paris fashion; although I think that even she was conscious that her splendour did not eclipse mine. They had not evidently expected to see me there, and both, I felt, watched very curiously for any slight giving-away upon my part. But if I could calmly meet Philip's eyes, it may be imagined that I was proof against the scrutiny of either Marian Trafford or her sister-in-law. And Mrs Chichester's softly spoken little aside: 'Did not I think that the bride and bridegroom were an admirably matched couple, even to age—eighteen and thirty was just as it should be; was it not?' was assented to with a cheerfulness which did not seem to gratify her as a looker-on might have expected it to do.

There was only one shadow on the bride's lovely face, and that came when she signed her name; and perhaps it was natural enough that Major Maitland should frown at the remembrance of the wrong done to his sister. But it was the last time Lillian would be so pained, and she was not allowed time to dwell upon it now.

When we stood aside for her and Philip to pass out, she caught my hand and drew me with them, and in that very unorthodox fashion we left the church and entered the carriage—'Mary's carriage,' as Lillian termed it. There not being room enough at the cottage, the breakfast was to take place at Hill Side, and we were driven there—so far as a carriage could convey us—for we had to alight at the foot of the hill and walk the remainder of the distance.

As soon as we reached the plantations, Lillian took my face between her hands and gazed at me with anxious tender eyes. Then, with a deep-drawn sigh of relief and a radiant smile she murmured: 'It was true, Philip; she *is* happy!'

'Yes; thank God!' he ejaculated.

I made it the occasion for a little jest about my truth having been doubted; and by that time some of the others had come up with us, when the bride naturally absorbed all the attention, and the rest was easy. It was the first wedding-breakfast at which I had been a guest, and therefore I was not *au fait* in such matters. I can only say that if there were any little divergences from the etiquette proper upon such occasions, they were unobserved by me. I knew that the two I most cared for in the world were made happy, and that all the rest of us were pleasant with each other, as befitting wedding-guests. I was afterwards told that the bride's-maids thought that they had not been sufficiently considered in being only provided with one gentleman, and he so grave a one as Robert Wentworth. And Philip's brother and his wife were

said to be very stiff with us all; whilst Major Maitland was more anxious than it was polite to be to catch an early return train, reminding his daughters that they must not be the cause of his losing it, and so forth. But I looked through rose-coloured spectacles, and it seemed all flowers and sunshine to me.

Dear old Mrs Tipper and I sat together; and it did me not a little good to feel the eloquent pressure of her hand, which she now and again slipped into mine as the breakfast went on. I am, to this day, not quite sure how much Mrs Tipper knew of the truth; but I saw that she at anyrate guessed something of it, when, in a tremulous voice, she whispered a few words about my having given happiness to her child.

I tried a little jest about still having enough and to spare.

'Yes, my dear; that is the best of it; you really are happy.' Thank God, you are reaping!—

I hurriedly commenced asking questions about Becky, who, as I had so much hoped she would, was about to become the wife of Tom. He was engaged for the garden at Hill Side, and it was arranged that he should live with his wife at the cottage. Mrs Tipper elected to continue her cottage life; and as she had become very much attached to Becky, she was very glad to adopt my suggestion, that the married couple should live with her.

It must not be supposed that I was ignorant of anything which had transpired during my absence. I had regularly corresponded with Lilian, although I held firm to my first resolution, not to return amongst them again until Philip and she were married, and so brought about the event at an earlier date than it might otherwise have taken place. I need not say that Becky proved a firm ally, and faithfully kept my secret. Faithful Becky! how difficult it was for some time to get her to talk about her happiness to me! This first day of my reappearance, I inquired in vain for Becky; she was not to be found. I only caught sight of her once when I was leaving Hill Side, watching me from the back staircase, her eyes and nose bearing eloquent witness to violent emotion; but when I turned to speak to her, she sped away as fast as her feet would carry her.

As soon as might be, the bride slipped away with Mrs Tipper and me, to the increased disapprobation of the bride's-maids, who prided themselves upon being acquainted with all the proprieties for such occasions. But it was not to be expected that we could allow two comparative strangers to act as fire-women to our Lilian; and we carried her off, regardless of the murmurs about its being 'all wrong—quite wrong!' and so forth.

Once alone together, we three behaved—well, I will say as any other three women who love each other and are not above having feelings might be expected to behave under such circumstances. I contrived to satisfy Lilian, as I had satisfied her aunt, that I was no unhappy martyr, as she asked me question after question, eyeing me with wistful loving eyes.

'And you will not desert us again, Mary?'

'No; I will not desert you again, Lilian.'

'It is quite delightful to see her like this—quite a grand personage, with a fine carriage and livery servants and all the rest of it; isn't it, auntie? I may now confess, Mary, that I have been the

least bit afraid that your talking about living in a grand old house with a number of attendants to do your bidding, was'—

'Was what, goosy?'

'Too much like a fairy tale; and you know you used to talk like that sometimes, when you—when I have fancied that you were not quite happy.'

'Are you satisfied at last, dearie?'

'Yes, I am—yes, quite. You look really happy.' I mentally offered up a thanksgiving, as she went on: 'But of course I am longing to know how it all came about. Recollect, you have promised to explain everything very exactly in your first letter. Recollect too that I leave dear auntie to your care; and of course we shall expect to find our sister here on our return.'

I promised; and when we presently conducted the bride in her travelling-dress to the drawing-room, she was looking happy enough to satisfy Philip, who, I noticed, glanced anxiously from me to her as we entered.

We all went down the winding path with them to the carriage waiting in the road below; and sent them off with all sorts of merry speeches and good wishes and the orthodox accompaniment of old slippers.

THE LAND OF THE PHARAOKS.

THE past lends to Egypt a charm more entrancing than its cloudless skies and delicious climate. Go where you will, antiquity meets you at every turn. Around you lie the ruins of cities whose very names have been obliterated in the silent march of the ages. Before you flows the sacred river upon whose waves floated centuries ago the little ark of the outcast Hebrew infant, and the golden barge of the gorgeous daughter of the Ptolemies. Time was when this old Nile was the highway down which many successive nations rushed to conquest: for the Ethiopian, the Assyrian, the Persian, the Roman, and the Saracen have all lorded it in turn in this ancient realm of the Pharaohs. Now vexed no longer with the fleets of rival monarchs, the mighty river rocks with slumberous swell the lotus lilies on its tranquil breast; and on its lonely banks, which have rung so often in days gone by to the shrill peans of triumph, the palms in the sultry noontide throw their long shadows athwart ruined temples and colossal statues, grand in execution and faultless in detail, which reveal in every outline the perfection to which the arts of architecture and sculpture were carried in this their earliest cradle. The soil is strewn with fragments of broken columns and defaced colossi. Buried beneath the drifting sand of the Desert lie the glorious and yet grotesque masterpieces of the Egyptian chisel. Serene, grave, majestic, inundated with a flood of harmonious light, the calm features of the once inscrutable Sphinx look down upon us, as many centuries ago they looked down in their grand repose upon the wondering Father of History. Time has pressed lightly on these Titanic temples and vast tomb palaces, but from their shadowy portals the worshippers have gone for ever. Desolate and state-fallen, they open now only to admit the curious stranger.

In *A Thousand Miles up the Nile*, by Miss Edwards, we have a lively gossiping description of the Egypt of to-day with its wasted temples and ruined palaces. Cairo—where Miss Edwards tells

us she arrived in the end of November 1873, with a party of friends in pursuit of dry weather—is a picturesque city. Seen from a distance embowered in gardens of the richest green, it looks like a forest of minarets and domes intermingled with palm-trees and acacia groves. The streets, as is always the case in eastern cities, are narrow and intricate; but their gloom is enlivened by a series of gorgeous bazaars, where the little pigeon-holes of shops are bright with many-hued carpets, and gay with delicately tinted silks, and glittering tissues of gold and silver. Here you can buy precious stones of varied value, and bracelets and collars of intricate and complex designs, such as were the fashion thousands of years ago at the court of the Pharaohs; or invest, if you choose, in a variety of warlike weapons, inlaid with gold and silver, and damascened with exquisite arabesque patterns.

The busy crowd passing and repassing the while, presents to the stranger a series of intensely interesting *tableaux vivants*. There, with ample turban and flowing beard, and long robes of striped silk, stalks the stately Turk, followed by a scantily clad Fellahin. Next comes some Light of the Harem, some Fatima or Eminah, mounted on a carefully painted donkey led by an armed slave. On the street this fair enchantress is but a shroud-like mass of drapery, through which the curious gazer can sometimes discern the outline of a delicately oval face and the flash of a black liquid eye. Behind her, in thin clinging robes of dark but vivid blue, with graceful form and carelessly veiled melancholy face, a Niobe in bronze, glides an Abyssinian slave-girl. By her side a swarthy Bedouin sheik reins in an Arab steed, whose prancings and curvettings somewhat disturb the gravity of the tiny donkey upon which that Englishman is mounted; while over all streams the sunshine of an Egyptian noon, flooding with light the unfamiliar draperies, the strange Saracenic architecture, and the varying features and costumes of each commingling race.

While conducting the important operation of bargaining for a dahabeeyah (a Nile-boat), Miss Edwards and her party went to interview the Great Pyramid. She had fancied that the Pyramids looked small and unimpressive when she first caught a glimpse of them from the railway carriage; but once at the base of this gigantic tomb, she realised, with a sense of awe and wonder, how mighty it was. As she lingered, loath to leave the scene, the sun set in crimson glory behind the sands of the Libyan Desert, and the shadow flung by this immense mass of masonry stretched full three-quarters of a mile over the plain below. 'It was,' she says, 'with a thrill of something like awe that I remembered that this self-same shadow had gone on registering not only the height of the most stupendous gnomon ever set up by human hands, but the slow passage, day by day, of more than sixty centuries of the world's history.'

Before starting up the Nile, Miss Edwards witnessed two of the characteristic sights of Cairo—a performance of howling dervishes, and the departure of a caravan of pilgrims for Mecca. She found the convent of the howling dervishes situated in a picturesque nook beyond the walls. The gateway and courtyard beyond were shaded by a great sycamore tree, through whose branches the glowing sunshine broke in vivid flecks and

bars of gold. About seventy dervishes were present; and with the aid of eight musicians, and to the chant of 'Allah! Allah!' they danced round in a circle until they had worked themselves up into a state of convulsive frenzy. Gradually their dance became a series of mad leaps, performed with incredible rapidity, their chant swelled into a hoarse scream, and at last one of the devotees fell writhing and shrieking to the ground. This ended the first performance; and the English ladies did not wait for a second.

Having made choice of a dahabeeyah (repleat the *Philia*, Miss Edwards and her party started with a fair breeze for their voyage up the Nile. This once sacred historic river is, as every one knows, all in all to the Egyptian. His harvests depend upon its beneficent inundations, its waves form his highway to the sea, he eats of its fish, he drinks of its waters, and finds them still, as his ancestors found them of old, delicious as the nectar of the gods. Egypt, baked and shrivelled by the glowing sun into one immense brick, annually sinks beneath the waters of the life-giving river, and emerges from the flood, fresh, radiant, shining, like an emerald, flower-crowned like Ceres of old, and holding in her full hands an ample promise of fruit and sheaf. A Nile voyage in favourable weather is about the pleasantest of all pleasant things. The large sails of the dahabeeyah swell out to the breeze like the wide snowy wings of a sea-bird, and fleet as that bird, she cleaves her way past water-palaces and suburban gardens. The minarets and domes of Cairo are left behind; the Pyramids, towering over the groves of palm, stand clearly out against the cloudless sky; and the distant ridges of the Arabian hills glow with softened shades of tawny purple. As evening falls, every charm of the landscape is subdued into a more tender repose; the night-breeze balmy and cool sweeps up the river; darkness follows, and your boat is moored for the night at Bedreshaym.

Morning on the Nile is inexpressibly fresh and beautiful. At the first faint streak of dawn the light mist clears away, and Aurora spreads for the sun a rosy chariot of clouds, into which he steps at once, flushing the stately palm-groves, and the gleaming river, and the picturesque water-wheels, and the swarthy crew, with a flood of golden radiance. There was, however, little time for sentimental feeling, our author's whole attention being claimed by a horrible clamour which arose outside, caused by the arrival of a regiment of donkeys attended by a phalanx of men and boys.

Mounted upon eight of these asinine martyrs, Miss Edwards and her party proceeded to Sakkarah and Memphis, riding through a country which would have been monotonous but for the subtle beauty of its colouring. Tender tints of rose, and warm tones of russet gold, pale opalescent blues and grays and dusky purples, were all blended by Nature's cunning brush, shading into the nearer green of the dusky palm forests, until they formed one inimitable whole. Sakkarah is a vast necropolis, whose more distinguished tombs are pyramids. The soil around is full of fragments of broken pottery, mummy gods, bones, shreds of linen, and lumps of a strange brown substance like dried sponge. Tread lightly, O Northern stranger! around you are the mighty dead; that brown spongy mass was once warm human flesh, instinct with power and passion;

that skull perchance once held the scheming brain of a Pharaoh, who reared for himself one of these vast sepulchres, little dreaming of this all too ignoble resurrection. Of Memphis, the ancient city of the Egyptian kings, only a few mounds remain embowered in vast palm-forests, through whose fan-like foliage the brilliant sunshine falls aslant upon a muddy pool, where, face downwards, lies the far-famed Colossus of Rameses the Great, which, like Cleopatra's Needle, belongs to the British nation. This, with a few battered sphinxes, is all that is left of one of the earliest cities of the world.

On their way to Minieh, a Moslem saint of peculiar sanctity, yeleft holy St Cotton, swam out to them, and having hallowed by a touch the tiller-ropes and yards of the *Phila*, dropped into the water again, and swam back to the shore. It happened to be market-day when they arrived at Minieh, and having stores to buy, they proceeded to it, and found almost everything exceedingly cheap. How it would rejoice the heart of a thrifty housewife here at home to be able to buy a hundred eggs for fourpence, or a couple of chickens for tenpence, not to speak of fine geese at two shillings a head! Large and very good turkeys may be bought for three-and-sixpence, a lamb for seven shillings, and a sheep for sixteen shillings or a pound, fruit and vegetables being proportionably moderate.

In Egypt, little children have very hard lines of it. It makes one's heart ache to read of the disease and suffering induced by the barbarous ignorance of their parents. Miss Edwards says: 'To brush away the flies that beset the eyes of young children is impious; hence ophthalmia and various kinds of blindness. I have seen infants lying in their mother's arms with six or eight flies in each eye; I have seen the little helpless hands put down reprovingly if they approached the seat of annoyance. I have seen children of four or five years old with the surface of one or both eyes eaten away, and others with a large fleshy lump growing out where the pupil had been destroyed.'

As a consequence of this horrible cruelty three children out of every five die in Egypt; and in certain districts every twentieth person is either wholly or partially blind.

On Christmas-day Miss Edwards entertained some friends, who were in a dahabeyah behind them, to dinner. The guests consisted of a bride and bridegroom, and a painter. The scene around their floating dining-room was lovely; the placid river flowed tranquilly through broad green savannahs, and breezes redolent of perfume fanned the lotus lilies beneath their prow. It required all the conventional sentiment which attaches to a blazing plum-pudding to convince them that it was really Christmas.

At Siout, the capital of Middle Egypt, they inspected the celebrated Stabl d'Antar. It is a splendid tomb temple hewn out of the rock. The roofs of its lofty chambers are painted in fresh and vivid colours, and the walls are covered with bas-reliefs and hieroglyphics.

En route to Denderah, at a part of the river where the banks were flat and bare, they saw on the western shore what seemed to be a large grizzled ape perched upon a dust-heap, and learned with intense surprise that it was Sheikh Seleem, a sort of Moslem St Simon Stylites.

There he sat in the gathering night, as he had sat for fifty years from darkness to dawn, and from dawn to darkness, amid inconceivable filth and squalor, not even moving to feed himself. The sailors shouted to him as they passed, loudly imploring his blessing; but he made no sign of response. Motionless as a huge frog, he squatted on his dust-throne, inflated with spiritual pride or madness, or both.

About ten miles below Denderah thousands of Fellahin were at enforced work on the embankment of a new canal. These canals are the life of Egypt; by them the supply of the precious water is regulated and its outlay economised. Without canals and the ever-recurring water-wheels, the fresh green beauty of the river-plains would soon disappear, and famine, gaunt and hollow-eyed, stalk upon the scene, with disease and death in its train.

At Denderah, among other interesting remains, they found a splendid temple in an almost perfect condition, with a finely executed bas-relief of Cleopatra. This queen of beauty, whose slaves were the masters of the world, is fair enough in this mask of stone to recall to Miss Edwards something of that loveliness which conquered Caesar. 'Mannerism apart,' she says, 'the face wants for neither individuality nor beauty. Cover the mouth, and you have an almost faultless profile. The chin and throat are also quite lovely; while the whole face, suggestive of cruelty, subtlety, and voluptuousness, carries with it an indefinable expression, not only of portraiture but of likeness.'

On the third day after leaving Denderah, they saw in the faint light of the early morning the gigantic propylons of Karnak towering vast and gray against the horizon. The warm flush of the dawn bathed with rosy light the range of precipitous hills, which are honeycombed with the tombs of the kings, and kissed into tender beauty the time-worn columns of Luxor, the ancient Woolwich of the Pharaohs. At Karnak, the ruins are stupendous; the eye loses itself in a waste of giant propylons, columns towering to the clouds, colossal figures in black granite, partially buried in the sand; and a little apart, in solitary grandeur, an immense obelisk, seventy-five feet high, covered with hieroglyphics and bas-reliefs, depicting scenes in the life of Rameses the Great. In the temple at Karnak, the great hall of pillars, roofless and vast, presents to the eye of the curious gazer forests of colonnades, aisles of pillars, huge pylons, towering like giants to the sky, half-hiding, half-revealing weird fantastic bas-reliefs of the gods, who glare, superb in ruin, over their desolated shrines. The sunlight streaming through the open portal shines on avenues of sphinxes, battered colossi, vast lengths of splendid bas-reliefs, glowing with a depth and freshness of colour which Time has had no power to fade; labyrinths of headless statues, prostrate obelisks, shattered images, all in such numbers that they produce a bewildering effect upon the mind.

At Esneh, their next halting-place, there was also a very beautiful temple, dedicated to Kneph, Assouan and Elephantine (the Isle of Flowers) came next. At Assouan, Egypt proper ceases, and Nubia begins. Here the traveller enters upon the region of the Cataracts, a succession of rapids extending almost all the way to Philæ. The Nile at this point is singularly picturesque. First narrowed between

banks of dark red cliffs, it suddenly expands almost to the breadth of a lake, and presents a broad expanse bristling with rocks and covered with innumerable islets, round which the water rushes in swirling eddies of foam. The navigation among these islets is difficult and dangerous; the boat half buried in spray, struggles gallantly forward, making a succession of rapid rushes, as if she were about to dive headlong over the fall; but it is too much for her; she recoils, quivers, turns round, and seems to be driving right upon a huge mass of black granite, when the Sheik of the Cataracts comes to her aid. This tutelary genius of the Nile dahabeeyahs has few of the external attributes of a hero. He is a little fat ugly man; but what of that? he knows his work, and can do it. A moment more, and the dahabeeyah and its inmates will be engulfed in the foaming abyss; but before that moment comes, he springs up, plunges into the torrent, pushes off the boat by sheer force of muscle; and then he and his tawny assistants drag her up the rapid.

It is a lengthy operation; and while it was in progress, Miss Edwards and her party made a pilgrimage to Philæ. Beautiful Philæ, the fabled tomb of Osiris, the Holy Island whose very soil was sacred, still preserves almost uninjured the beautiful temples and gorgeous tomb-palaces which were the master-pieces of the later style of Egyptian art. The vastness, the gigantic proportions of Thebes and Karnak, are not aimed at here; on the contrary, there is an inimitable grace, an airy lightness about cloister and colonnade, which are half Greek. And what Art has so nobly accomplished, Nature has not been slow to assist. The cloudless sky, the graceful palms, the majestic carob trees, enwrap with greenness and beauty all the wealth of colouring, of sculpture, and of architecture which the past has bequeathed to this spot, once so hallowed, now so lonely. Lingerer tenderly reminiscent on the pearly strand of this voluptuous Egyptian Iona, one half expects to see the white-robed priests of Isis wind again in long procession out of the shadow into the sunshine, solemn and stern, vainly questioning of the forgotten ages—What meaneth this?

Leaving Philæ, ever lessening in the distance, the travellers glide away into Nubia, and are quickly conscious of a perceptible change, first in the river scenery, which becomes wilder and more grand, and then in the character of the inhabitants, who become more savage, and at the same time more truthful and honest. The climate becomes warmer, and with the accession of heat, turbans disappear, and the only headgear is that furnished by Nature, consisting of profuse thickly matted hair, plentifully anointed with castor-oil, a species of pomade which frizzling in a tropical sun makes a Nubian beau or belle an exceedingly savoury individual. Very little clothing is worn; the young of both sexes are content with a slight covering round the waist, and the matrons with a single long loose garment of blue. The Nubian women are often beautiful, with lustrous gentle eyes, and grand majestic figures like Junos in bronze. If their wardrobes are slender, their jewel caskets seem well supplied, for they almost invariably wear a profusion of gold and silver ornaments.

Nubia, like Egypt, abounds in temples. At Abou-Simbel there are two excavated out of the

sandstone rock. On the façade of the great temple there is a wonderful row of colossal figures, portraits of Rameses the Great and some of his more immediate successors. This Rameses is believed with good reason to have been the Pharaoh who oppressed the Israelites. Many hieroglyphic records of his reign have been discovered, some of which when deciphered run thus: 'I, the scribe, have obeyed the orders of my master, and served out rations to the Hebrews, who quarry stone for the palaces of King Rameses, Mer Ammon.' This monarch, whose passion it was to build, has left a more ineradicable impress of his personality upon the scenes of his former glory, than any of his predecessors or successors have done. His face, preserved for us by an Abou-Simbel Michael Angelo, still frowns in lonely majesty across the desert sands, handsome, placid, sternly implacable, precisely the man who would account the tears and anguish of helpless thousands as less than nothing when weighed against a pet project.

Shortly after leaving Abou-Simbel, Miss Edwards had a pleasure which she had almost despaired of—she saw a crocodile. The creature was asleep upon a sandbank, and was to all appearance exactly like a log of drift-wood, that our authorised to believe it was a veritable crocodile until, and by the approach of the dahabeeyah, it cocked its tail, wriggled off the bank, and splashed the water with amazing rapidity.

They were now on their return journey, and wind was against them, necessitating frequent vexatious delays.

At a place called Ayserat they paid a visit to a native gentleman, Ratab Agha, and before leaving were conducted to his harem. He had two wives, the principal wife was very beautiful, with auburn hair, soft brown eyes, and lovely complexion; her rival was plain; and both were magnificently dressed in black robes embroidered with silver, full pink Turkish trousers, and silver bracelets and anklets. They wore their hair cut straight across the brow and plaited behind into an infinitude of small tails studded with coins.

A parting visit to the Pyramids followed; and with an inspection of these colossal monuments, which remain an imperishable testimony to the vigour of the world's dawn, they bade adieu to what was once the mighty temple-crowned empire of Rameses the Great.

A QUEER CLUE.

IN TWO CHAPTERS.—CHAPTER I.

As an ex-detective, I am often asked to relate my adventures, and at one time I was ready enough to do so; but I soon found that my tales were looked upon as dull prosy things, and not at all like what detectives ought to have to say for themselves. Everybody seemed to think that detectives ought to find things out by a sort of magical divination; but I was reckoned a pretty good one, and I have known some of our greatest celebrities; and the only way any of us ever found anything out was by inquiring of everybody who was likely to know a little, keeping our eyes on any probable party, holding our tongues, and putting all the scraps together. Now and then we are befriended by a lucky chance; and when this happens, we get a

hundred times more praise than when we puzzle out the darkest and toughest case. The last affair I was ever engaged in was of this kind. I was first concerned in it two years before I left the police, after, by-the-bye, I had quite given up the detective branch; and I resumed it three years afterwards, that is three years after I had left the police; and this is how it occurred. I must first say, however, that I don't at all regard this as one of the dull prosy cases I referred to; in fact, it was the most exciting business I was ever engaged in.

I had left the detective work, as I said, and indeed had left London, for when I grew a little tired of the business, I was recommended to the authorities at Combested, a thriving market-town in one of the home counties; and I had a very comfortable situation there, having little to do, very good pay, and being head of the borough police. Of course there is a great deal of difference between life in the country and life in town, and from a policeman's view it perhaps appears greater than it does to anybody else; and whereas

I had often wondered how anybody could be detected in London, I was equally surprised to think how anybody could hope to escape in the country; for, excepting when strangers came down on some carefully planned burglary, we could nearly always tell where to look for our men if anything went wrong; in short, I knew everybody. As a matter of course, everybody knew me.

There was a middle-aged party lived in a quiet row of houses in Orchard Street—which ran parallel with our High Street—a Miss Parkway, who was reputed to be pretty well off, although not extremely rich, and reputed also to be rather eccentric. She lived by herself, in the sense of having none of her relatives with her; but there were other persons, although not many, in the large house where she lodged. I had my attention drawn to her by seeing her walking repeatedly in company with a young man of no very good character, who was fully twenty years her junior; and at last I heard she was going to be married to him. All the town professed to be surprised and shocked at this, but I wasn't. Whether detectives get hard of heart in such things or not, I can't say, but nothing in the way of a woman of five-and-forty marrying a man of five-and-twenty would ever surprise me; nor should I be surprised at the man marrying the woman if she had money, as in this case. After all, although I have said John Lytherly—that was his name—was of no very good character, yet there was nothing serious against him. He was a good-tempered, good-looking, easy sort of fellow, with a lot of cleverness about him too, that always shewed itself when he wasn't wanted; and never shewed itself when it might be of service. He now called himself a photographer; but had been a solicitor's clerk, an actor, a traveller for a wine-merchant, a barman, and had once, before his mother died, been bought out of the Lanciers. However, it was now pretty well known that John was going to marry Miss Parkway, and half the young chaps in Combested ridiculed and envied him by turns.

Matters progressed so far that it was known the lady had given orders to Bunnyman and Company, our chief bankers, to call in a thousand pounds of her money which was out on mortgage; and it was said she intended to buy one of the houses in the High Street and fit it up as a photographer's. It

was also reported that old Mr Bunnyman said: 'I hope, Miss Parkway, that whatever you do with your money, you will do nothing that you have not well considered.' And it was also said that Miss Parkway replied: 'If I wanted to be preached to, Mr Bunnyman, I should go to your brother the Ranter;—perhaps because Mr Bunnyman had a brother who preached, though he wasn't a Ranter at all. However, as these two were by themselves, I don't see how any one could have known what passed; and these confidential conversations in books and histories are certainly things I don't believe in.

It was known for certain, however, that she had not only given notice, but had actually withdrawn the money; and among other things it was said that she had admitted to her landlady Mrs Ambliss, that the match with Lytherly would break off all intimacy with her friends. She only had one relative who came to see her, and that was a gentleman living some forty miles away, but he had not been to Combested lately. Whether he was offended or not, neither the landlady nor lodger could say; but the latter feared he was, as she had written and told him exactly how affairs stood and what steps she had taken, but had received no reply to her letter. Lytherly seemed, very naturally, to be brightening up, and took our joocular congratulations—for I had my say as well as the others—in a good-tempered although rather a conceited style. One annoyance he felt, which was, that everybody to whom he owed money—which was every one who would trust him—was anxious to be the first paid; and thinking that a little gentle pressure might help them, two or three of the tradesmen took out county court summonses against him; and this, as he said, was very hard on him and very selfish. However, there seemed a little chance that they would defeat themselves, for harassed and worried by these doings, he was forced to ask Miss Parkway for an advance of money, being the first time he had ever done so. He had received money from her; but she had always offered it, and pressed it upon him when he made a show, if he was not actually in earnest, of wishing to refuse it. Whether she was in a bad temper at the time, or whether she was hurt at his making such a request, Lytherly could not say, but she refused to make the advance, and they parted worse friends than they had been for some time.

All this the young fellow let out on the *Bell* on the Saturday, as the refusal happened on the Friday. A great part of it in my hearing, for I generally took my pipe and glass at the *Bell*, and I saw that he was well on for tipsy. He had indeed been drinking there some hours, and would perhaps have stopped longer, but that the landlord persuaded him to go home. He was hardly able to walk, and as I did not wish him to get into any trouble, which might mean also trouble to me, I followed him to the door, determined I would see him to his lodgings if necessary; but just then his landlady's son happened to come by. The poor chap, as I well remember, had been to the dentist's to have a tooth drawn; but his face was so swollen that Mr Claves would not attempt to draw it till daylight, and the poor fellow was half distracted with pain. He offered to see Lytherly home; and as he lived in the same house and slept in the same room of course he was the fittest party

to do so; and so off they went together, and in due course of time I went home too.

Next day was Sunday, and a quiet day enough it always was in Combstead. Younger men might have thought it dull, but it suited me. I had lived fifty years in London, and did not object to the steady-going ways of the little town; in fact I took to going to church, and all sorts of things. Well, the day passed by without anything particular; and I was really thinking of going to bed, although it was only half-past nine, for I felt sleepy and tired, when I heard somebody run hurriedly up our front garden, and then followed a very loud double-knock at the door. I lived, I should mention, at a nice house in Church Street, which was a turning that led from the High Street into Orchard Street, where, as I have said, Miss Parkway lived. I was just about to drink a glass of egghot, which is a thing I am very partial to when I have a cold, and this was winter-time; but I put the tumbler down to listen, for when such a hurried step and knock came, it was nearly always for me; and sure enough, in another half-minute the door was opened, and I heard a voice ask if the superintendent was in; then without any tapping or waiting, my door was thrown open, and I saw a young woman, whom I knew as servant to Mrs Ambless. The moment I saw her, I knew something serious was the matter; long experience enabled me to decide when anything really serious was coming.

'Now, Jane,' I said, 'what is it?'

'Oh, Mr Robinson!' she exclaimed (I forget whether I have mentioned before that my name is Robinson, but such is the fact), 'come round at once to missus's, for we have found poor Miss Parkway stone-dead and murdered in her room.'

And with that, as is a matter of course with such people, off she went into strong hysterics. I couldn't stop with her; so I opened my door, and equally, as a matter of course, there I found the landlady and her servant listening. 'Go in and take care of that girl,' I said; 'and one of you bring her round to Orchard Street as soon as she can walk.' I didn't stop to blow them up, and they were too glad to escape, to say a word; so off I went, and found a little cluster of people already gathered round the gate of the house I wanted. 'Here is the superintendent!' I heard them say as they made way for me. I hurried through, but had no occasion to knock at the door, for they were on the watch for me. Mr and Mrs Ambless were in the passage, and a neighbour from next door; all looked as pale and flurried as people do under the circumstances.

'This is a most terrible affair, sir,' says poor old Ambless, who was a feeble superannuated bank clerk. 'We have sent for you, sir, and the doctor, as being the best we could do. But perhaps you would like to go into her room at once?'

I said I should, as a matter of course; and they led me to her room. There was a light there, and they brought more up, so that everything was plainly visible. The people had not liked, or had been afraid to disturb anything, so the room was in the same state as when they had entered it. It appeared they had not been surprised at Miss Parkway not coming down in the morning, for this was not uncommon with her; but when the afternoon and evening passed away and she did not appear, and no answer was returned to their

rapping at her door, they grew alarmed, and at last forced an entrance, when they found the furniture in confusion, as though a struggle had taken place, and poor Miss Parkway in her night-dress lying on her face quite dead. They had lifted her on to the bed, and from the marks on her throat had judged she died by strangulation. As I could do no good to her, I noticed as closely as I was able the appearance of the room, and especially looked for any fragments of cloth torn from an assailant's clothes, which often remain after a struggle; or a dropped weapon, or any unusual marks. But I could see nothing. There was no difficulty in deciding how the assassin had entered the apartment, and how he had left it, for the room was on the ground-floor, and the lower sash of one of the windows was thrown up, although the blind was drawn fully down. The furniture was knocked over and upset; the washstand, which was a large and somewhat peculiar one, of a clumsy and old-fashioned description, had been overthrown, and had fallen into the fireplace, where it lay resting on the bars in a very curious manner; while the jug had fallen into the grate, deluging the fireplace with water, but, extraordinary to relate without being broken; not broken to pieces, anyrate, although badly cracked. A great noise had probably been made, and cries probably uttered; but Ambless and his, both deaf, and they and the servant, the top of the big house in the front. Miss Parkway slept at the bottom of the house, and in a room which was built out from the side of itself.

I had time to hear and notice all this, before the doctor came; and his attendance was a mere matter of form. No one could harm the poor woman now; so, with the intention I had gained, I went to the house of the nearest magistrate, a very active gentleman and a solicitor. I ought to have mentioned that the drawers in which Miss Parkway kept her money and jewellery were forced open and every valuable abstracted; the only trace of them being a few links of a slight chain of a very unusual pattern, which, with a curious stone, the lady generally wore round her neck. This chain had evidently been broken by the violence used, and parts of it scattered about; the stone was gone.

Information was of course sent to Miss Parkway's relative who came sometimes to visit her. And the result of all the inquiries made was to make things look so very suspicious against young Lytherly, and so much stress was laid upon his quarrel with Miss Parkway on her refusal to lend him money—which seemed known to everybody—that I was obliged to apprehend him. I didn't want to hurt his feelings; so I went myself with a fly, although his lodgings were not half a mile from the town-hall, so as to spare him from walking in custody through the streets. I found him at home, looking very miserable, and when he saw me he said: 'I have been expecting you all the morning, Mr Robinson; I am very glad you have come.'

'Well, I'm sorry,' I answered. 'But you may as well remember that the least said is soonest mended, Mr Lytherly.'

'Thanks for your caution, old friend,' he says with a very sickly smile; 'but I shan't hurt myself, and I feel sure no one else can do so. Why

I said I was glad you had come, was because from Sunday night, when the murder was found out, until now, middle day on Tuesday, everybody has shunned me and avoided me as if I had the plague. I know why, and now it will be over.'

I didn't put hands off on him or anything of that; and when we got into the street he saw the fly, round which there had already gathered at least a score of boys and girls, who had, I suppose, seen me go in. He looked round, and said: 'This was very thoughtful of you, Mr Robinson; I shall not forget it.' We drove off, and spoke no more until we arrived at the town-hall. Here the magistrates were sitting; and here I found a tall, dark, grave-looking gentleman talking very earnestly to Mr Wingrave, our chief solicitor. I soon found this was Mr Parkway, the cousin of the murdered lady. He was giving instructions to the lawyer to spare no expense; to offer a reward if he thought it necessary; to have detectives down from London, and goodness knows what. Mr Wingrave introduced me, and was kind enough to say that there was no necessity for detectives to be brought, as they had so eminent a functionary as myself in the town.

It was supposed that this would be merely a preliminary examination, but it turned out differently. A few of Lytherly's companions—although, as it transpired afterwards, they fully believed him guilty—were yet determined he should have a chance, and so subscribed a guinea for old Jenny Croton, the most disreputable old fellow in the town, but a very clever lawyer for all that; and Jenny soon came bustling in. He had a few minutes' conversation with Lytherly, and then asked that the hearing might be put off for an hour. This was of course granted; and by the end of that time he had overwhelming evidence to prove an alibi; for the landlady's son hadn't slept a wink for his toothache, and he was with Lytherly until dinner-time on Sunday; and then the accused went for a walk with a couple of friends, and did not return until after dark, having spent two or three hours at a public-house some miles off, as the landlady, who happened to be in the town, it being market-day, helped to prove; the rest of the time he was in the *Bell*, as was usual, poor fellow.

There was no getting over this. There was not a shadow of pretence for remanding him, and so—much to Mr Parkway's evident annoyance—Lytherly was discharged. He became more popular than ever among his associates—although the respectable people of the town looked down upon him—and they had a supper in his honour that night, at which old Jenny Croton presided. In default of Lytherly, no clue could be found. Not a shilling of Miss Parkway's money was ever discovered in her apartments; so her murderers had got clear away with his booty. Many wisacres said we should hear of Lytherly quietly disappearing after things had settled down.

Some little excitement was created by Lytherly attempting to get into the sole funeral carriage that attended the hearse; but Mr Parkway would not permit such a thing, and was himself the only follower. It was very clear that the stranger, in common with many others, was not half satisfied with the explanation which had secured Lytherly's escape; and as I was on the ground at the funeral, I saw, as did everybody else who was there, the

frown he turned on the young man, who, in spite of his rebuff, had gone on foot to the churchyard.

Mr Parkway left that evening, having placed his business in the hands of Mr Wingrave; for as there was no will, he was the heir-at-law. Now this was a very curious affair about the will, because Miss Parkway had told her landlady not many days before, that she *had* made her will, and in fact had shewn her the document as it lay, neatly tied up, in her desk. However, it was gone now; and she had either destroyed it, or the person who had killed her had taken that as well as the money; and even if the latter was the case, it was hardly likely to turn up again. So, as I have said, Mr Parkway went home. The solicitor realised the poor lady's property; and all our efforts were in vain to discover the slightest clue to the guilty party. As for Lytherly, he soon found it was of no use to think of remaining in Combestead, for guilty or not, no one of any respectability cared to associate with him; and, as he owed to me, the worst part of it all was that old Croton the lawyer, whenever they met at any tavern, would laugh and wink and clap him on the shoulder, and call upon every one present to remember how poor old Jenny Croton got his young friend off so cleverly, how they 'flummoxed' the magistrates and jockeyed the peelers, when it was any odds against his young friend.

So he went; and a good many declared he had gone off to enjoy his ill-gotten gains; but I never thought so; and one of our men going to Chatham to identify a prisoner, saw Lytherly in the uniform of the Royal Engineers, and in fact had a glass of ale with him. The young fellow said it was his only resource; dig he could not, and to beg where he was known would be in vain. He sent his respects to me; and that was the last we heard for a long time of the Combestead murder.

A CURIOUS PICTURE-BOOK.

We have before us one of the most singular picture-books that can well be imagined; singular because unexpected in its character. It is a book containing the trade-marks of several thousand merchants, manufacturers, and shopkeepers; each device printed, in the proper size, from a block or cast of the original; and the whole collection likely to be very formidable in dimensions by-and-by. The system has sprung out of the passing of a particular Act of Parliament two years ago; and we shall best facilitate a comprehension of its nature and purport by glancing at that which preceded it.

A trade-mark and an armorial bearing have much the same meaning, however different in splendour and dignity. Each is a token to distinguish certain persons from others. In the middle ages distinguished families and famous old commercial companies had their marks; so had monasteries, abbays, and convents; so had municipal towns and chartered guilds; so had merchants and shipowners. By degrees the mark became embodied as a trade-mark in some instances, as an heraldic shield or crest or coat-armour in others. Some noble families at the present day can shew coats of arms including (in the device) trade-marks once belonging to the founder of the family when a trader.

As a feature in legitimate commerce, it is fair

and right for a man to affix to his wares some mark or symbol to distinguish them from the wares of other traders. The mark may have a significant or symbolical meaning, or it may be wholly fanciful; no matter which, provided it be his and his only. The range to choose from is so wide as to be practically limitless; for the mark may be a name, initial, signature, word, letter, device, emblem, figure, sign, seal, stamp, or diagram; and it may be impressed upon or otherwise attached to a cask, bottle, vessel, canister, case, cover, envelope, wrapper, bar, plate, ingot, sheet, bale, packet, band, reel, cork, stopper, label, or ticket. He must indeed be a difficult man to please who cannot select out of all these. A quadruped, bird, or fish; a sun, moon, star, or comet; a triangle, diamond, square, oval, or hexagon; a crescent, a castle, a ship; a portrait, medallion, or profile; a view of a warehouse or of a plantation—anything will do, if it suffices to imply 'This is mine: you must not imitate or forge it.'

No one can glance through the daily papers, in the columns relating to actions at law, without seeing evidence how jealously the privileges of trade-marks are watched by the owners; nor is it difficult to see why this jealousy is exhibited. If A possess something which has a money-value to him, B would like to possess it also if honestly obtainable, or something sufficiently like it to be equally advantageous. Unfortunately men do not always wait to consider how far honesty should actuate them. There is a vast amount of shabby speculation on the part of men who avail themselves, directly or indirectly, of other men's trade-marks, in order to obtain a share of custom which does not fairly belong to them. A belief or hope is entertained that if the public do not know exactly which is the real Simon Pure, a sham Simon may perchance come in for some of the pickings.

Suppose, for instance, there is a Macassar oil which has brought a fortune to a particular firm; another concocter of toilet 'requisites' may be tempted to adopt the same title, in the hope that the originator may fail to shew that the Straits of Macassar have really anything to do with the matter. If a compounder of pills and ointments (say Mr Jones) is driving a flourishing trade at a particular shop, and if another person (also named Jones) opens a shop close by, and sells similarly curative pills and ointments, he may hope to trade partly on the good-luck of the other, and may defy any one to prove that the surname has been falsely assumed. If a trader be making a good thing out of baking powder, and another man wraps up another (perhaps an inferior) kind of baking powder in packets printed almost exactly in the same style and wording, he trusts to an unwary public being deceived in the matter. No small difficulty has been felt at times, by judges and jurors, in determining whether a particular designation or inscription really deserves the rank of a trade-mark, and ought to be protected as such. If a man's name be combined with the name of the article sold, this would in most cases be a good trade-mark: such as Day and Martin's blacking, Delarue's playing-cards, Elkington's electro-plate, Rimmel's perfumed valentines, Reid's stout, Beaufoy's vinegar, Fortnum and Mason's hamper, Crosse and Blackwell's pickles, and the like. But if there happen to be two men of the same

name in the same trade, then there may possibly be materials for wrangling, should the men be disposed to wrangle. It is for this reason that Dent's watches, Mappin's cutlery, Clarke's coals, Smith's gin, &c. would not be alone sufficient as trade-mark designations; because there are two persons or two firms entitled to use it, something additional would be needed.

The imitation of a label is one of the most prevalent modes of displaying the shabby dishonesty of those who disregard the rights conferred by a trade-mark; but brands and painted marks are imitated with equal boldness, if not so frequently. Soda-water bottles which have in the making been stamped with the name of a particular firm have, in like manner, got into the hands of persons who fill them with soda-water of an obscure and unrenowned quality. Wine-casks and cigar-boxes, branded with well-known names, have similarly been utilised by the sellers of inferior commodities. As to two Howqua's mixtures, it was shewn that there was no such person as Howqua concerned in the matter. Is it true that Birmingham manufacturers often receive orders from merchants to make certain goods, and to stamp on them certain trade-marks belonging to third parties; and that the manufacturers do this as a matter of course, 'all in the way of business'? Is it true that, in obedience to orders from wholesale houses in the Manchester goods-trade, manufacturers will sometimes put two hundred yards of sewing-thread on a reel, and paste on it a label denoting three hundred yards? If so, 'pity 'tis 'tis true.' The latter of these two ifs does not relate to a trade-mark piracy, but it is equally indicative of a shameful disregard of the principles of *mouru* and *tuum*.

Foreigners have had in past years much reason to complain of English imitations of labels, inscriptions, signatures, and trade-marks. Among metal goods there was one American Company famed for the really good edge-tools manufactured by them; they were imitated at Birmingham, so far as regards a similar mark stamped on each article, or a similar label attached; of course the tools, whether good, middling, or bad, were not what they professed to be; they were worth less in the market, but were nevertheless sent forth as if made by the original Company—a bit of sharp practice very little creditable to the parties concerned.

Most amply have foreigners taken their revenge; indeed it is not improbable that they first began this game; seeing that they had more to gain from a great manufacturing nation than we had to gain from them in this way. Sheffield has been despoiled by them in a notable degree. Knives, files, fish-hooks, needles, &c. made very cheaply of inferior steel, receive in the German workshops (more perhaps than in those of France or Belgium) brands, marks, wrappers, and labels so closely resembling those of eminent Sheffield firms, as to deceive all but the most wary. In some instances, the foreigners have given the go-by to us with an almost superb audacity: initiating the very notification on English wrappers that to imitate that particular trade-mark is felony! Print what they may, stamp what they may, English manufacturers of high-class goods find that they cannot ward off this kind of cheater—cheater, not of money direct, but of the good reputation which possesses

money's worth. However, international trade-mark laws are doing something to lessen this unfairness—of English towards foreigners as well as of foreigners towards English. Some further illustrations of these matters will be found in the volume of this *Journal* for 1859.

Now for our picture-book.

An Act of Parliament passed two years ago ordained that from and after a specified date all new trade-marks must consist of the printed or impressed or woven name of a particular firm or individual; or a copy of the written signature of the party concerned; or distinctive devices, designs, marks, headings, labels, or tickets. The scope is sufficiently wide to give an ample choice; but it must not extend to representations of the Queen, the royal family, or foreign sovereigns; nor to royal or national arms, crests, or mottoes; nor to the arms of cities, boroughs, countries, or families; nor to representations of prize or exhibition medals; nor to the use of the words 'trade-mark,' 'patent,' 'warranted,' or 'guaranteed.' No such restrictions, however, are placed upon any trade-marks that were in use before the passing of the recent Act. The Lord Chancellor and the Commissioners of Patents divide between them the carrying into effect of the new statute. A new office has been established for the registry of trade-marks, with a registrar at its head. The Lord Chancellor has framed rules and regulations, with a tariff of fees approved by the Treasury. The registry, when once granted for a trade-mark, holds good for fourteen years, and is renewable for equal periods of fourteen years on the payment of additional fees. There is so much to pay on application for registry; then so much for any and every extension to other classes of goods; then so much if there be two or more marks for the same article; then so much on actual registration; then so much for every change of name or of address; and then so much for a certificate. The outlay amounts to a good many pounds altogether, but not approaching the cost of a patent. The registrar has a certain time allowed to him between the application and the registration to make the necessary scrutiny, &c. Every application for registry, accompanied by a drawing or engraving, must give an accurate description of the trade-mark, specifying any words, &c. to which the applicant attaches special value—of course within the limits permitted by the rules.

As one registration of any trade-mark is valid only for one class of goods, a careful classification becomes necessary; and this has proved to be one of the most remarkable features in the system. Some one's brains, or the brains of more than one, must have been a good deal exercised in dividing the whole range of human industry into fifty classes, and in assigning the contents of each class. For instance, the first three classes comprise chemical substances and preparations used in manufactures, agriculture, and medicine; the fourth resins, oils, and gums. Then follow three great classes to include metals, machines, and engines; four more for instruments and tools of various kinds; and two for entery and edge-tools. Without specifying each individually, it will suffice to say that two classes are occupied with works in the precious metals and jewellery; two with glass and china; two with building and engineering materials and appliances; two with arms, ammunition, and explosives; one for naval equipments and appli-

ances; and one for land vehicles of all kinds. The textile branches of industry make a large demand for classification, in regard to raw materials, yarns, thread, and piece-goods: three for cotton, three for flax and hemp, one for jute, three for silk, three for wool and worsted, and one for carpeting and rugs. Saddlery and harness require one class to themselves, so does made-up clothing, so do india-rubber and gutta-percha goods. Paper, printing, and bookbinding; furniture and upholstery; food and ingredients for food; fermented and distilled liquors; aerated and mineralised beverages; tobacco, snuff, and cigars; agricultural and horticultural seeds; candles, matches, lamp-fuel, and laundry substances; perfumery and toilet requisites; games and toys of all kinds—claim each its own class. Lastly comes class fifty, a refuge for the destitute, comprising everything 'miscellaneous,' everything for which room cannot well be found in any of the other classes. The registrar has sometimes a little difficulty in deciding to which class a particular trade-mark properly belongs.

As one of the consequences of the new Act of Parliament, a *Trade-mark Journal* has been established by the Commissioners; and this is our picture-book. It appears once, twice, or thrice a week, according to the requirements of the subject, and (at the time we are now writing) has reached about its seventieth number, and contains something like four thousand pictures or representations of trade-marks. To what extent the collection will increase by-and-by, no one can form even a guess. The illustrations relate to the trade-marks applied for under the new Act; and the *Journal* also gives the name and calling of each applicant, a description of the goods, and a statement of the length of time during which the mark has been used. The *Journal* thus affords all persons interested in trade-marks authoritative information as to the nature of the marks used in the respective trades. A wood-cut block or an electrotype must be forwarded to the office, representing the particular trade-mark applied for, if it is to appear in the *Journal*; and each quarto page is made up by printing from several such blocks or casts. Even if the mark consists only of names and words, still a block or plate must be sent representing it.

The Master, Warden, Searchers, and Assistants of the Cutlers' Company at Sheffield possess, in virtue of ancient charters, very special privileges, which the new registrar of trade-marks is not allowed to contravene. He works in harmony with the Company; and every trade-mark recognised by the latter may claim of right admission into the register. To facilitate the granting of trade-marks for cotton goods, an office has been established at Manchester for the exhibition of all marks, devices, headings, labels, tickets, letters, &c. used in the cotton trade, and locally designated 'cotton-marks'; and a committee of experienced Manchester men decide which among these symbols or hieroglyphics deserve to be regarded as trade-marks for registration.

Who can count the varieties of fanciful devices that make their appearance in our picture-book? Analogy between the device and the goods is sometimes attended to; but more frequently it is thrown overboard altogether. Do we require portraits of individuals, celebrated or otherwise? Here is a sarsaparilla man, here one renowned for cod-liver

oil, and anon a hero of sewing-machines; Sir Walter Raleigh is brought into requisition by a tobacco manufacturer; while a cigar-maker, taking advantage of the recent excitement connected with a famous picture, adopts a wood-cut copy of Gainsborough's 'Duchess of Devonshire.' Or are we likely to be smitten with views and landscapes? We can choose between the Egyptian pyramids lighted up with an orient sun; a view of Keswick (near which most of our black-lead for pencils is obtained); a view of a paper manufactory. In some sense apposite are a baby in a cradle, for needle-making; a broken willow-pattern plate, for a newly warranted cement; the Colossus of Rhodes [roads], for railway signals; Cupid sharpening his arrows, for emery-grinding wheels; a smart man measuring round a smart forehead, for hat-making; the sun eclipsing nearly everything, for the eclipse sauce; a dog's head, for fibrine dog-cake; four nigger plantation minstrels, for cigars; and 'No place like home' as a trade-mark motto for fenders and fire-irons.

To account for others, the fancy must make wide excursions indeed. A maker of edge-tools adopts stars and crowns, a monkey eating an apple, an elephant's head, oxen and lions with initials on their flanks, a negro's head, a cassowary, a boot, a sledge; and the head of an Aztec accompanied by the inscription: 'Look for this stamp on each tool, if you want a genuine article made from electro-boracic cast-steel.' A locomotive does not seem specially suitable as a trade-mark for silk goods; nor a rearing and roaring white lion for Portland cement; nor a feudal castle for good hosiery; nor a crowing cock for artificial manure; nor a helmsman at the wheel for aerated waters; nor a tearing ranting buffalo for floor-cloth.

POPPET'S PRANKS.

POPPET, the subject of the following sketch, was a little brown monkey, who was for several years a member of our family. She had no hair on her face or the palms of her hands—I say *hands*, as they were beautifully formed, with long filbert nails, very pretty although black, except the thumb, which certainly was not aristocratic, being as broad as long. Her feet were like her hands, but longer, and she could use them with equal facility. Her eyes were really beautiful, of a clear golden brown; the nose certainly rather flattened; and the mouth large, but displaying a set of beautiful little pearly teeth that many a belle might have envied. Altogether Poppet was a very pretty little thing; and when arrayed in a little tartan dress with white tucker, her hair brushed neatly, and an amiable expression on her face, looked very winsome and coaxing; but that expression could vanish with the swiftness of lightning, and one the reverse of prepossessing take its place.

How we lived for the first three months after her arrival, when she roamed the house at her own sweet will, has been a source of wonder ever since; certainly it was in much discomfort; when working, sitting with our scissors and thread in our pockets, for if they were placed on the table, in an instant they were carried to the top of the window

cornice, Poppet's favourite retreat. Sometimes, if coaxed by an apple, she would drop them; at other times no blandishments would prevail, and she would sit drawing her sharp little teeth over the thread, cutting through every row. If she captured a paper of pins or needles, she delighted to climb to the top of a tall plum-tree, where, free from molestation and deaf to entreaties, she amused herself by dropping them one by one. One day my mother entered the bath-room just in time to see Poppet dart out of the window to a large tree, which unfortunately grew close by, with a quart bottle of magnesia in her hand, which she proceeded to shower down, much amused at the miniature snow-storm, and not leaving a grain in the bottle. The meals at that time were most uncomfortable. When there were eggs for breakfast, we had to pocket or hide those not in immediate use, or Poppet would snatch them up and be out of reach in a moment. As a general rule, when food is fairly in the mouth, it may be considered safe; but I have often seen Poppet perch on some one's shoulder, open the mouth by a sudden jerk of one hand on the nose, and another on the chin; then the little brown hand would dive in, and the contents be transferred to her pouches; all being done with such extreme rapidity that strangers used to think it little short of magic.

It was always a terrible business to get Poppet to bed, having to coax her down by placing an apple or piece of cake on the table, and then try to seize her when she approached the decoy; but her movements were so rapid that this had often to be repeated several times. At last patience failed, and it was resolved she should be put to bed at six o'clock, when she had her last meal, being quite sure of her then, as she always had a 'goodie,' which she was allowed to take herself from a bottle of mixed fruit-drops, kept for her special delectation. Poppet evidently regarded the production of this bottle as the event of the day, but never learnt by experience that the bottle neck was too narrow to draw back her hand when quite full, and that it could only be done if one or two goodies were seized. Each night she would sit with her little brown face puckered up into an expression of intense anxiety as she clutched as large a handful as possible. After trying ineffectually, she would draw out two with a sudden dash, and endeavour to get her hand in again before the stopper was put on; and her movements were so quick that she often succeeded!

Everything she stole was transferred to her pouches. Anything soft, as mashed potato or rice pudding, she would eagerly cram there, until her cheeks were quite distended, when she had a most comical appearance, her face being far broader than long. When anything small was lost, the first places examined were Poppet's pouches. I remember once when she had been found in my father's dressing-room, they contained a most wonderful collection, consisting of two pair of gold studs, half-a-dozen buttons, a clock-hand much twisted, several large needles and pins, a piece of toffy, and a small piece of carrot. Verily, as we used to think, those same pouches must have been lined with leather. Poppet had a great objection to a cuckoo clock we had, and her first performance was to open the little door at the side, thrust in her arm, drag out

the poor cuckoo and bite off its head; and it was a frequent exploit (having broken the glass by dragging the clock several times off the mantelpiece on to the floor) to twist up the hands like cork-screws, giving the poor clock the most demented expression. Of course it didn't go well. Who could expect it, after such repeated shocks to its constitution!

Poppet's bedroom was in a little cupboard under a washstand; the hot-water pipe passed through it and made a kind of curve. On this a cushion was placed; and her ladyship being clothed in a garment soft and warm, was popped in, shut up with extreme rapidity, and came out in the morning, as nurse used to say, 'as warm as a little toast.' When we first got her, everybody said we should not keep her over the first winter; but we took such good care of her that she lived over several winters. Some of the family, I may observe, did secretly wish she were not so tenacious of life, or the winters more severe. Words would fail to mention the mischief she wrought; the vases and crockery she smashed; the treasured articles (still retaining marks of her teeth) she spoiled during her life of three years with us. She seemed to have the power of elongating her limbs or throwing out an extra one in the most mysterious way. If, for instance, you left her chained to the fender and returned in about a minute, you were certain to find Poppet playing with something from the far end of the room.

She was so immensely strong she frequently dragged a heavy iron fender across the room and into the passage; and so cunning, that no knot, however complicated, could hold her long. Those cunning little fingers could have unravelled the Gordian knot itself. If she found she was watched, she dropped her hands so as to cover what she was doing, and assumed a vacant expression. She, however, never could repress a scream of triumph as she broke loose. Then she would dash round, knocking over vases and inkpots, and tipping over glasses generally full of something that would stain; doing as much mischief in five minutes as the most terrible child could in a day. Then ensued a chase, greatly enjoying on one side, though not on the other; Poppet springing from picture to picture, making the cords creak with the sudden jerk, her chain rattling on the glass of bookcases and mirrors as she flew along their tops; at last taking refuge on the cornice, leaving every one panting and exhausted from the chase and fright. She was a great source of terror to nervous visitors, nor was this always unfounded, as on one occasion, when a lady was leaving the house congratulating herself that the visit was safely over, Poppet suddenly made her appearance, and nearly dragged the bonnet from her head. Another time, when my mother entered the drawing-room she found a friend lifting the cloth, and looking under the table. She explained her peculiar action by saying she was afraid that dreadful monkey might be there.

I once had a friend Miss G., staying at the house who took a great dislike to Poppet, and was always making disparaging remarks about her little ladyship. She was always very quick in perceiving who liked her and who didn't; so this disapproval she returned with interest. She would creep along the floor dragging the fender until she could get hold of Miss G.'s foot, when she would scold at her in the angriest manner, her eyes glowing with

indignation; and when loose, try to get at her with great fierceness.

On one occasion Poppet chased Miss G. up-stairs into her room, and then perched herself on a large wardrobe close to the door, evidently waiting for her to come out. Hearing my screams of laughter—for Poppet's anger and the lady's fright were most comical—she opened the door an inch or two and was beginning: 'Has that little wretch gone? I wonder you can keep such an abominable little brute in'—when she caught sight of Poppet's wicked grinning little face, just going to launch herself at the open door, which was closed with a hasty slam; nor would she venture out until after repeated assurances that Poppet was safe in her cage, for we had at last really been obliged to get her one, and a very strong one too. When she was first put into it every bar was shaken with all her force; and not until by frequent trials did she become convinced that they were beyond her strength.

One of my sisters constituted herself Poppet's dressmaker. She wore brown holland dresses, bound with scarlet in summer, and plaid or dark-warm cloth in winter. One day, however, Maggie's enthusiasm always to have Poppet well dressed received a sudden check. She had just completed a new tartan, when turning away for a moment, she perceived a strong smell of burning; and found Poppet had ungratefully consigned the pretty new dress to the flames. Another time, when we were removing to a different part of the country, Poppet was so upset by the noise and confusion, that in sheer wantonness she laid a pair of boots in the blazing grate; fortunately they were rescued before they were much injured.

We shall never forget the consternation that prevailed when the well-known cry, 'Poppet's loose!' echoed through the house. Every one flew to their bedroom to close the window, as, the house being covered with ivy and surrounded by trees, the monkey could make exit by any that happened to be open.

Frequently she did mischievous things in the most ingenious way. One day, finding a hair frissette on the stairs, my mother took it to her room; her sudden entrance startled Poppet, who bolted out of the window into a cherry-tree, knocking over and breaking a large mirror, also leaving three bottles that were on the mantelpiece pouring their several contents of oil, glycerine, and Eau de Cologne on to the carpet. Although Poppet screamed loudly when angry or excited, she bore pain wonderfully, and never cried out. Once when she was being chased for stealing some cough-drops, one of her fingers was put out of joint in the scrimmage. I rolled her up in a shawl and took her to the doctor. He must have put her to considerable pain in putting it in; but except by frowning very ominously, the creature made no sign. As soon, however, as I got outside the door, she turned round and nearly made her teeth meet in my thumb, evidently thinking: 'There! That's to pay you out for the pain you have made me suffer.' And once when, with her on my knee, I was using a pair of very sharp scissors, she inserted her finger between the blades, which nearly divided it; however, she never cried out, but actually bit at the wound till it bled terribly. She once startled us by making her appearance in the drawing-room with face, hands, and feet dyed a brilliant purple. We found she had upset a bottle of violet ink in

one of the bedrooms, and had then paddled about on the white quilt and toilet-cover. The ink being 'permanent,' caused the occupant of that room to regard the little brown offender with righteous indignation for some time.

Poppet was extremely conceited, and fond of 'shewing off.' The children of the village school used regularly to stop before the house to see the monkey, when she would dance up and down the boughs of the trees overhanging the lane, making an occasional wicked dash at the nearest little one, when the circle would break with a scamper and scream. She was very jealous of any child that came to the house, and once when a baby was the object of general admiration, managed to pinch its cheek. All the animals seemed to like her: the cat was her special friend; but when Pussy had four kittens, Poppet would turn the poor mother out of her bed, and nurse the babies herself; and very nicely she did it, sitting up holding them properly, giving a funny little giggle when the little furry things tickled her. I am sorry to say she was not always so gentle, as she was met dragging a kitten down-stairs by the tip of its tail, thumping its little head on every step. The old mother came regularly to say good-morning to Poppet, making that caressing tone in which a cat speaks to its kittens. Poppet usually returned the attention by dragging open Pussy's mouth to see what she had had for breakfast. When she had finished her own morning meal, she would sit in the saucer and rock it up and down; or placing the saucer on her head, look like a little heathen Chinese.

At last Poppet got to be too expensive a luxury. In one week she broke an unusual number of valuable things. She began the campaign by dragging the breakfast-room clock and two large old china bowls off the chimney-piece; of course the china was smashed to atoms, and the clock so injured, that ever since its voice has been most painfully cracked. The next exploit was to send a large globe spinning down from a high bookcase, thereby breaking the stand to fragments. Then in a dance along the hall, she sprang on to one tip of a pair of immense horns, bringing them down, and causing them to snap on each side of the mounting.

Every one's patience was now exhausted, and 'Poppet must be got rid of!' was the universal cry. A visit was paid to a celebrated menagerie then in the town; but the monkeys' quarters were found so cold and dirty, and their little faces looked so sad and anxious compared to Poppet's contented well-fed look, that we decided it was impossible to send her there. It was useless to offer her to our friends; her fame had blown far and wide, and how we could keep 'such a tiresome mischievous creature' was the wonder of all who knew us. At last it was decided it would be more merciful to poison her than to give her where she would be ill-used or ill-fed. It was a cruel resolve, but what were we to do? The error had consisted in our ever trying to domesticate such an untamable creature. Poppet must die, and in as simple a way as possible. Prussic acid being said to be instantaneous, was to be the agent of destruction; and as I was supposed to have the most nerve in the family, notwithstanding my objections it was unanimously resolved I should administer it. The poison re-

mained under lock and key for some time; at last, worked up by several dreadful breakages, I gave it in some grapes, and retired from the room feeling like a murderer, leaving poor Poppet extended insensible on the rug. In about half an hour I returned, expecting to find her quite dead; but no; there she was, sitting on the fender, scratching her legs, and looking only a little languid. The revulsion of feeling was so great, and her invalid airs so comical and coaxing, that we felt rather ashamed of having attempted the life of so winning a creature. I may observe, however, that that feeling died away as she recovered and the old amount of mischief went on; and all looked very blue when some one read 'that monkey frequently lived to be a hundred years old;' there seemed nothing for it but that Poppet should go as a family heirloom to the only son. Then it began to be whispered I might try another dose, but I steadily refused; till at the end of one hot summer afternoon which I had spent in my room, I went down-stairs, to find my mother looking very white, and hear her say: 'If I had known you were in the house I wouldn't have done it;' and to find that poor Poppet had been very effectually 'done for' at last; that for the first time in her little tricky roguish life she was really quiet. She was buried in the garden, and a headstone with a suitable inscription erected to her memory.

Now that the anguish for the loss of old friends (in glass and china) has been blunted by time, as we sit round the fire 'between the lights,' the recital of Poppet's pranks is listened to with rapt attention by the children; and I often think, with Frank Buckland, that many a more valuable friend may be less missed and less sincerely mourned than a pet monkey.

MY BABY.

THEY made a little crown in heaven

When she was born—
Only the breath of angels on it;
Neither flower nor leaf upon it;
Never a single thorn.

Slowly it grew in form and beauty

As the days passed on—
Tinged her eyes with love-light's dawning;
Ruby lips to love-words forming;
Lisping future song.

Brighter still the crown was budding

As the year grew old;
And my simple heart beguiling,
Angels shewed it to me smiling;
So the days grew cold.

'Look! O mother! look upon it!'

(Baby lay asleep);
'In the heavens' sunny bowers
Twine we everlasting flowers;
Think upon it in the hours
When you will weep!'

'Look! O mother! fair we've made it
For an angel's head!'

There was something strange and wild
Struck my heart—the angels smiled:
I turned to look upon my child—
And she was dead.

F. ROCHAM.

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CHARLES KINGSLEY AT HOME.

ALL who had the pleasure of knowing the Rev. Charles Kingsley, author of *Hypatia*, *Westward Ho*, and *Alton Locke*, will acknowledge that however great he was as a parish clergyman, poet, novelist, naturalist, sportsman, he was greater still at home. And how was this greatness shewn? By his self-denying efforts to give joy to his wife and children, and chivalrously to take away from them whatever was painful. No man ever excelled him in the quality of being 'thoroughly domesticated.' In actual life we fear this is a rare attainment, for it is nothing less than the flower that indicates perfectly developed manhood or womanhood. This flower beautified and sweetened Canon Kingsley's life. He was a hero to those who had greater opportunities of knowing him than have most valets. Whatever unheroic cynics may say of the disenchanting power of intimacy, there was an exception in his case. How much such an example should teach us all! Not one in ten thousand can hope to become the many-sided man Kingsley was, but none of us need despair of making that little corner of the world called 'home' brighter and happier, as he made Eversley Rectory. We can all make our homes sweet if, when company-clothes are doffed, we clothe the most ordinary and commonplace duties of home-life with good temper and cheerfulness.

Because the Rectory-house was on low ground, the rector of Eversley, who considered violation of the divine laws of health a sort of acted blasphemy, built his children an outdoor nursery on the 'Mount,' where they kept books, toys, and tea-things, spending long happy days on the highest and loveliest point of moorland in the glebe; and there he would join them when his parish work was done, bringing them some fresh treasure picked up in his walk, a choice wild-flower or fern or rare beetle, sometimes a lizard or a field-mouse; ever waking up their sense of wonder, calling out their powers of observation, and teaching them lessons out of God's great green book, *without their knowing they were learning*. Out-of-doors and

indoors, the Sundays were the happiest days of the week to the children, though to their father the hardest. When his day's work was done, there was always the Sunday walk, in which each bird and plant and brook was pointed out to the children, as preaching sermons to Eyes, such as were not even dreamt of by people of the No-eyes species. Indoors the Sunday picture-books were brought out, and each child chose its subject for the father to draw, either some Bible story, or bird or beast or flower. In all ways he fostered in his children a love of animals. They were taught to handle without disgust toads, frogs, beetles, as works from the hand of a living God. His guests were surprised one morning at breakfast when his little girl ran up to the open window of the dining-room holding a long repulsive-looking worm in her hand: 'O daddy, look at this *delightful* worm!'

Kingsley had a horror of corporal punishment, not merely because it tends to produce antagonism between parent and child, but because he considered more than half the lying of children to be the result of fear of punishment. 'Do not train a child,' he said, 'as men train a horse, by letting anger and punishment be the first announcement of his having sinned. If you do, you induce two bad habits: first, the boy regards his parent with a kind of blind dread, as a being who may be offended by actions which to him are innocent, and whose wrath he expects to fall upon him at any moment in his most pure and unselfish happiness. Next, and worst still, the boy learns not to fear sin, but the punishment of it, and thus he learns to lie.' He was careful too not to confuse his children by a multiplicity of small rules. 'It is difficult enough to keep the Ten Commandments,' he would say, 'without making an eleventh in every direction.' He had no 'moods' with his family, for he cultivated, by strict self-discipline in the midst of worries and pressing business, a disengaged temper, that always enabled him to enter into other people's interests, and especially into children's playfulness. 'I wonder,' he would say, 'if there is so much laughing in any other home in

England as in ours.' He became a light-hearted boy in the presence of his children, or when exerting himself to cheer up his aged mother who lived with him. When nursery griefs and broken toys were taken to his study, he was never too busy to mend the toy and dry the tears. He held with Jean Paul Richter, that children have their 'days and hours of rain,' which parents should not take much notice of, either for anxiety or sermons, but should lightly pass over, except when they are symptoms of coming illness. And his knowledge of physiology enabled him to detect such symptoms. He recognised the fact, that weariness at lessons and sudden fits of obstinacy are not hastily to be treated as moral delinquencies, springing as they so often do from physical causes, which are best counteracted by cessation from work and change of scene.

How blessed is the son who can speak of his father as Charles Kingsley's eldest son does, "Perfect love casteth out fear," was the motto, he says, 'on which my father based his theory of bringing up children. From this and from the interest he took in their pursuits, their pleasures, trials, and even the petty details of their everyday life, there sprang up a friendship between father and children, that increased in intensity and depth with years. To speak for myself, he was the best friend—the only true friend I ever had.' At once he was the most fatherly and the most unfatherly of fathers—fatherly in that he was our intimate friend and our self-constituted adviser; unfatherly in that our feeling for him lacked that fear and restraint that make boys call their father "the governor." Ours was the only household I ever saw in which there was no favouritism. It seemed as if in each of our different characters he took an equal pride, while he fully recognised their different traits of good or evil; for instead of having one code of social, moral, and physical laws laid down for one and all of us, each child became a separate study for him; and its little "diseases an moral" as he called them, were treated differently according to each different temperament. . . . Perhaps the brightest picture of the past that I look back to now is the drawing-room at Eversley in the evenings, when we were all at home and by ourselves. There he sat, with one hand in mother's, forgetting his own hard work in leading our fun and frolic, with a kindly smile on his lips, and a loving light in that bright gray eye, that made us feel that, in the broadest sense of the word, he was our father.'

Of this son, when he was an undergraduate at Cambridge, his father (then Professor of History) writes: 'Ah! what a blessing to be able to help him at last by teaching him something one's-self.' And to a learned 'F.G.S.' he says very seriously: 'My eldest son is just going off to try his manhood in Colorado, United States. You will understand, therefore, that it is somewhat important to me just now whether the world be ruled by a just and wise God or by O. It is also important to me with regard to my own boy's future, whether what is said to have happened to-morrow (Good Friday) be true or false.' In this way Kingsley educated his heart and became truly wise. For no matter how extensive may be our stock of information, we cannot be called wise unless heart become to head a helpmate.

And how well he used his matrimony—a state that should be to all the means of highest cul-

ture, or 'grace.' Sympathising with a husband's anxiety, he once wrote to a friend: 'I believe one never understands the blessed mystery of marriage till one has nursed a sick wife, nor understands either what treasures women are.' He believed in the eternity of marriage. 'So well and really married on earth' did he think himself, that in one of his letters he writes: 'If I do not love my wife body and soul as well there as I do here, then there is neither resurrection of my body nor of my soul, but of some other, and I shall not be I.' And again in another letter: 'If immortality is to include in my case identity of person, I shall feel to her for ever what I feel now. That feeling may be developed in ways which I do not expect; it may have provided for it forms of expression very different from any which are among the holiest sacraments of life. . . . Will not one of the properties of the spiritual body be, that it will be able to express that which the natural body only tries to express?'

Kingsley and his future wife met for the first time when he was only twenty years of age in Oxfordshire, where he was spending his college vacation. 'That was my real wedding-day,' he used always to say. The Cambridge undergraduate was at the time going through the crisis in a young man's life that may be called without irreverence 'moral measles.' He was then full of religious doubts; and his face, with its unsatisfied hungering look, bore witness to the state of his mind. He told her his doubts, and she told him her faith; and the positive, being stronger than the negative, so prevailed that he was no longer faithless but believing. Hitherto his peculiar character had not been understood, and his heart had been half asleep. It woke up now, and never slept again. For the first time he could speak with perfect freedom, and be met with answering sympathy. And gradually, as the new friendship deepened into intimacy, every doubt, every thought, every failing, every sin was laid bare. Counsel was asked and given; and as new hopes dawned, the look of hard defiance gave way to a wonderful humility and tenderness, which were his characteristics, with those who understood him, to his dying day. 'My memory often runs back,' writes an early friend of his, 'to the days when I used to meet dear Kingsley in his little curate rooms; when he told me of his attachment to one whom he feared he should never be able to marry.' But things turning out brighter than he expected, the same friend records how, calling at his cottage one morning, 'I found him almost beside himself, stamping his things into a portmanteau. "What is the matter, dear Kingsley?"—"I am engaged. I am going to see her now—to-day."'

His chivalrous idea of wedlock was only natural, for he always attributed to Mrs Kingsley's sympathy and influence his success, saying that never but for her would he have become a writer. Writing to a friend on the subject of marriage, he says that it is his duty to hold the highest and most spiritual views, 'for God has shewed me these things in an eventful and blissful marriage history, and woe to me if I preach them not.'

Writing to his wife from the sea-side, where he had gone in search of health, he says: 'This place is perfect; but it seems a dream and imperfect without you. Kiss the darling ducks of children for me. How I long after them and their

prattle. I delight in all the little ones in the street, for their sake, and continually I start and fancy I hear their voices outside. You do not know how I love them; nor did I hardly till I came here. Absence quickens love into consciousness.—'Blessed be God for the rest, though I never before felt the loneliness of being without the beloved being whose every look, and word, and motion are the key-notes of my life. People talk of love ending at the altar. . . . Fools! I lay at the window all morning, thinking of nothing but home; how I long for it!'—'Tell Rose and Maurice that I have got two pair of bucks' horns—one for each of them, huge old fellows, almost as big as baby.'

Writing from France to 'my dear little man,' as he calls his youngest son (for whom he wrote the *Water Babies*), he says: 'There is a little Egyptian vulture here in the inn; ask mother to shew you his picture in the beginning of the Bird book.' When smarting from severe attacks on his historical teaching at Cambridge, he could write to his wife: 'I have been very unhappy about your unhappiness about me, and cannot bear to think of your having a pang on my account.' From America he writes: 'My digestion is perfect, and I am in high spirits. But I am home-sick at times, and would give a finger to be one hour with you and G. and M.'

From such things, which, though they may appear little, are really the great things of life, or at least its *heart's ease*, Canon Kingsley got power to do and to suffer.

Coming out from service in Westminster Abbey, he caught a cold; but he made light of it, for he could think of nothing but the joy of returning with his wife to Eversley for Christmas and the quiet winter's work. No sooner had they returned home than Mrs Kingsley became seriously ill. On being told that her life was in the greatest danger, Kingsley said: 'My own death-warrant was signed with those words.' His ministrations in his wife's sick-room shewed the intensity of his faith, as he strengthened the weak, encouraged the fearful speaking of an eternal reunion, of the destructibility of that married love, which if genuine on earth, could only, he thought, be severed for a brief moment.

At this time Kingsley was himself ill, and on the 28th December he had to take to his bed, for symptoms of pneumonia came on rapidly. The weather was bitter, and he had been warned that his recovery depended on the same temperature being kept up in his bedroom and on his never leaving it; but one day he indiscreetly leaped out of bed, came into his wife's room for a few moments, and taking her hand in his, he said: 'This is heaven; don't speak;' but after a short silence, a severe fit of coughing came on, he could say nothing more, and they never met again. For a few days the sick husband and wife wrote to each other in pencil, but it then became 'too painful, too tantalising,' and the letters ceased. A few days after this, the preacher, poet, novelist, naturalist died, January 23, 1875, and was universally lamented, for England had lost one of her most estimable men—not great in the ordinary sense of the word, for Kingsley could lay no claim to be a profound thinker. His philanthropy confused his perceptions, as when in his writings he denounced large towns and mill-owners, and

proposed to restore the population to the land. Such 'socialism' as this would throw us back into ignorance and poverty, instead of solving the difficult modern problem of rich and poor. Kingsley was great only as regards the feelings. There he may be said to have made his mark.

How many of Charles Kingsley's works will last? Some (with whom he himself would probably have agreed) think that *Hyppatia* and a few songs, such as the *Sands of Dee* and *Three Fishers*, are his only contributions to English literature likely to endure. It may be that he had too many irons in the fire for any of them to become white-hot. We prefer to think of him as a minister of the Gospel, who not only preached piety but shewed it at home, by being a dutiful son, a wise father, and a husband whose love during thirty-six years 'never stooped from its lofty level to a hasty word, an impatient gesture, or a selfish act, in sickness or in health, in sunshine or in storm, by day or by night.'

'He was a true and perfect knight' is our verdict, on rising from the perusal of his biography. It is surely a great encouragement to think that all who cultivate their hearts may, without his genius, hope to imitate the home-virtues of one who, however great in other respects, was, in our opinion, greater at home.

THE LAST OF THE HADDONS.

CHAPTER XXXVI.—WAGES.

AFTER the bride and bridegroom were gone, occurred the first slip in my behaviour. The rest of the company had returned to the house, and I suppose I must have stood in the road—gazing in the direction the carriage had taken, the sound of the distant bells floating faintly towards me in the summer air—so long as to be unconscious of the lapse of time, when gently and lightly a hand was laid upon mine, and it was drawn under Robert Wentworth's arm.

'You are wanted up there, Mary,' he said cheerfully. 'Mrs Tipper does not, I think, find herself quite equal to Mrs Dallas and Mrs Trafford; to say nothing of two discontented bride-maids, and a father who came here under protest, and was only allowed to perform half the duty he came to perform. You took that out of his hands, you know; the giving away was virtually yours.' Going on to talk amusingly of the incongruous materials which went to make up the wedding-party, and so giving me time to recover my self-command. It was very soon put to the test. There was, to begin with, some pretty banter from Mrs Chichester to parry, when we reached the green terrace, where the guests were sitting, to enjoy the air and lovely view, and from which I suddenly remembered they could see the part of the road where I had been standing.

'We began to fear you must be ill, Miss Haddon, seeing you stand so long motionless in the road. It was quite a relief to see you move at last when Mr Wentworth joined you—it really was!'

Probably Robert Wentworth considered that this kind of thing was what I required, for he left me

to it, and devoted himself to the not very easy task of trying to reconcile the two pretty bride's-maids; gravely listening to their assurances that the whole affair had been shockingly mismanaged from first to last! I soon had enough to do to reply to the patter of questions with which I was assailed from Marian and Mrs Chichester.

Where in the world had I been hiding myself all these months? Had I really come into a large fortune, and turned Mr Dallas off, as people said; or was it the other thing? As I did not know what 'the other thing' was, I could not answer for that; but acknowledged to having been fortunate; smiling to myself as I wondered what they would think of my idea of good fortune. Of course they would know what my real position was in time; but for the present I was mischievous enough to let them imagine any improbable thing they pleased. But there was one thing which they must not be allowed to have any doubt about, and that was my regard for Philip and Lilian, and hearty concurrence in the marriage.

'I am so glad—so very glad; because we can now speak very decidedly upon the point. People are so terribly unkind and censorious; are they not, Miss Haddon?'

'Some are, Mrs Chichester; yet I think, on the whole, censorious people do a great deal less mischief than they are supposed to do. My experience is happily small in such matters; but I believe that censorious people are generally well known to be so, and therefore they are not capable of doing much harm.'

'Then it was *not* true, Miss Haddon; I am so very pleased to be able to say so.'

'What was not true, Mrs Chichester?'

'Oh, I would rather not repeat, really.'

'Well, I only know Caroline says she's heard it said over and over again that you ran away in despair, because you found that Mr Dallas and Lilian were untrue to you,' said Marian, less scrupulous about repeating than the other.

'That is really too ridiculous!' I ejaculated.—'But you will be able to tell your friend or friends that you did not see a love-lorn damsel to-day, Mrs Chichester,' gazing at her with steady calm eyes.

'You certainly don't look a bit love-lorn,' candidly said Marian.

'O no,' chimed in Mrs Chichester. 'If you will pardon the jest, I might say you looked a great deal more as though you had *found* a lover, than lost one!' with a meaning glance in Robert Wentworth's direction.

'Will you excuse my asking if you had that dress direct from Paris, Miss Haddon?' inquired Marian.

'Paris? No; it came from Madame Michaux,' I replied, happily recollecting that Jane had mentioned that name.

'Oh, that is the same thing; isn't it? She charges enormously; but one is quite sure of having just the right thing from her. I suppose you have all your dresses from her now?'

'No; not all,' I said, smiling at the remembrance of my every-day attire.

'They say brown is to be the new colour: the

Duchess of Meck—Meck—— (What's her name, Caroline? those German names are so absurd!)—is wearing nothing else but brown at Homburg.'

'I have been wearing brown some time,' I replied, almost laughing outright.

'Some people always contrive to be in advance of the fashions,' she said a little disconcertedly.—'Are they going away already, Caroline; just inquire if the carriage is there, will you?—I see you have drab liveries, Miss Haddon; ours is changed to claret; the Marchioness of—— Breaking off to make a reply to a few words from the little bride's-maids, who with their father were taking themselves off from the uncongenial atmosphere. 'O yes; went off very nicely indeed; did it not? I wanted them to have the breakfast at Fairview, or at anyrate to have two or three of the men-servants to wait. But the party is small certainly, and everything has been very well contrived. No one is inclined to be very critical at such times. I hope you will be able to come down to Fairview before you return to Cornwall; any time which may suit you best. You need not write; we are always prepared for visitors.'

Both sisters hurriedly explained that their stay in town would be very short, and that there was not the *slightest* chance of their having a spare day.

Then there was one other little trial of my nerves—the few words which had to be spoken to Mr and Mrs Dallas; but pride came to my assistance, and I got through it pretty well, bearing their curious looks and gracious speeches with at anyrate apparent stoicism. Under other circumstances, I might have been somewhat amused by Mr Dallas's remark, that for his part he wished I had not thrown Philip over; accompanied as it was by a comprehensive glance at 'my carriage' waiting in the road below.

As soon as they left, I felt at liberty to whisper a loving good-bye to dear old Mrs Tipper, with a promise to see her and clear up all my mysteries on the morrow, and take my departure. In a matter-of-course way, Robert Wentworth walked with me down the path, talking in the old pleasant easy fashion until he had put me into the carriage. Then just as I was bending forward to say the one word 'Home,' he gave the order 'Greybrook Hall.'

'Wait, John.'

The man stood aside; and I added to Robert Wentworth: 'You know then?'

'Of course I know,' he replied with a quiet smile.

I shrank back. He made a gesture to the footman, gave me the orthodox bow, and I was driven away.

Not a little agitated, I asked myself how much more did he know—all? If he recognised me that night in the wood, he did know not only what I had done, but what it had cost me to do it! I was no heroine; I have shown myself as I was on Philip's wedding-day; but I had not won my peace without many a weary struggle for it. Once—three months after my departure from the cottage—I had stolen down in the darkness of evening to watch the shadows on the blinds, and perhaps catch the sound of a voice still so terribly dear to me. I saw Philip and Lilian together, and recognised that they were lovers, and then I knew that the victory was not yet won.

An hour later some one stooped over me as I lay crunched in the woods. 'Are you ill? What is the matter with you, good woman?' said the familiar voice of Robert Wentworth, as he laid his hand upon my shoulder. 'It is bad for you to be lying here this damp night.'

I shrank away, drawing the hood of my cloak more closely round my face, which I kept turned away. He stood still a few moments, and then without another word passed on. I had hitherto always persuaded myself that he had not recognised me; but now my cheeks grew uncomfortably hot with the suspicion that he did know me, and that the passing silently on was the very thing which a delicate consideration for me would prompt him to do. I was only surprised that it had not occurred to me before. I never had succeeded in throwing dust into Robert Wentworth's eyes when I had tried so to do. I knew now that it was to him Jane Osborne had alluded when she jested about a certain friend of hers who was so interested in all that concerned me, and whom I was to know more about by-and-by. I had sometimes a little murmured in my heart at having to give up Robert Wentworth's friendship with other things, knowing the worth of it, and he had been watching over me all the time! He had traced me at once; but respecting my desire to be lost to them all for a time, he had not obtruded himself upon me, contenting himself with obtaining an introduction to Jane Osborne and making friends with her.

That I had been watched over, had been shewn to me in more ways than one. I could almost smile now, holding the key, as I recollected many a little speech from Jane Osborne which seemed to breathe some stronger spirit than her own. Tenderly anxious about me, and inclined to pet me as she was, she would now and again spur me on to my work with a few words, which puzzled me extremely from her lips, but which I now could see she had been instigated to speak by one who knew me better than she did. But I had not much time for reflection; the drive was only three miles, and the ground very quickly got over by a couple of spirited horses. It seemed but a few moments after I had left Robert Wentworth in the road before I was at home.

It is now time to explain what has doubtlessly suggested itself to the reader, that I had been acting as superintendent of the Home for the last twelve months. Nancy had given me a hint that Mrs Gower had sent in her resignation of the office, having amassed a comfortable independence. My visit to town the day before I left the cottage had been for the purpose of seeing Mrs Osborne, the foundress of the Home, and I had the good fortune to find favour in her sight. She saw that it was a crisis in my life, and was inclined to be my friend, had we two not needed each other. I went to stay with her a couple of days until Mrs Gower's departure, and then was duly installed in the latter's place.

As I expected that Lillian would hope to trace me through Nancy, the latter was drafted into Jane Osborne's establishment for a few weeks. Consequently, when Lillian made her appearance at the gates, she was informed that Nancy had gone to some lady whose address the portress for the nonce was not acquainted with. As I hoped she would, Lillian jumped to the conclusion that I was the

lady alluded to, and was thus thrown off the scent as to my whereabouts.

What shall I say—what ought I to say about my management of the Home? I think as little as possible. But I will say that my success has been greater than I dared to hope for, although I have had a great deal to unlearn as well as learn. All sorts of objections were in the outset made to what were termed my innovations, and perhaps they were rather daring; but I was beginning to be able to reply to objectors by more cogent means than words.

As to myself—could anything have been more delightfully refreshing to a wearied spirit than was the greeting which I received on entering the long room on my return that afternoon, a welcome from twenty smiling faces! It is the long room to which the reader has been previously introduced, with a difference; the high brick wall before the windows is gone, and a light palisading marks the boundary of the grounds, without obstructing the view, a very fine one, of the most beautiful part of Kent. Moreover, the room was to-day *en fête*; decorated with flowers and evergreens, and with a feast, almost as grand as that I had just been a guest at, spread upon the long tables in honour of my sister's wedding-day. I do not like to write the kind words of 'Welcome home' patterned out around me. Jane Osborne and I went to my room; and whilst I threw off my finery and slipped on my brown dress (the only badge of distinction between me and my protégées on ordinary days was my mother's ring), I set her mind at rest as to the state of mind in which I had returned.

After tea we had a reading. Reading aloud or music on certain evenings of the week, whilst the inmates worked, was another of my innovations. That night too we had a new arrival. As I afterwards learned, she had been sought out specially to be brought down there, and a new-comer was always under my particular care, and slept in the place of honour—a little room adjoining my own. Not a little astonished seemed the poor wail when ushered into our gaily belacked room, and received as a welcome guest to our evening's entertainment. Perhaps my few words to that poor girl when I bade her good-night was as good a termination to Philip's wedding-day as could be desired for me.

A VISIT TO AMAZONIA.

THE Amazon, as is pretty well known, is a river of great length and more wonderful for its breadth in South America, entering the Atlantic between Brazil and Guiana. I am going to speak of Pará, a Brazilian port not far from the sea, to which I paid a visit, by what is known as the Pará estuary. The blue ocean had been left the day before. Passing some islands bearing clumps of palms, anchor was dropped in front of the city of Pará, a gun fired from the bridge, and immediately a fleet of shore-boats came off, keeping at a respectable distance, however, until the board of health, customs, and other formalities usual upon entering a Brazilian port had been observed; but no sooner had permission been given, than the deck was swarming with men seeking fares.

'You want a boat go ashore, sir?' inquired a demure swarthy man about fifty, who stood twirling

his cap in hand; 'cos I take you for five shillins, carry what you got to hotel; an if you like to give me anything afterwards, much obliged.'

'That will do!' I returned. And in a few minutes we were speeding towards the landing-place—a flight of wooden steps, crowded with men and boys, anxious to know the latest home prices of india-rubber and other products. The heat was excessive. Not a breath of air stirred on shore; and although longing to ramble through the town, I felt it advisable to rest a while first; so we went direct to the Hotel de Commercio in the Rua da Industria, kept by M. Ledue, an enterprising Frenchman. Here, single rooms with food run from ten to fifteen shillings per diem. The food is excellent, everything considered; but the rooms are dirty and unfurnished, having each but one chair—invariably broken—a hammock slung in a corner, and a hard bed and straw bolster covered with but one sheet. The sanitary arrangements too are far from perfect.

Most places are celebrated for something; Pará is celebrated amongst other things for its bats. Enormous specimens, a foot or two across the wings, may be seen banging to and fro about the veranda and bedrooms; beetles and cock-roaches abound too; but there are places up the river where these are an infinitely greater plague.

The town of Pará is situated about seventy miles from the Atlantic. It has several spacious squares, such as the Praças do Cartel, marine arsenal, government palace, and Mercado. If clangour of bells and cracking of rockets above steeples at high mass are indicative of religious enthusiasm, the Paraenses ought to be very devout. They certainly are not badly off for churches, of which I counted a considerable number.

The streets in this Brazilian town are laid out at right angles, upon the American block plan; half-a-dozen are paved with limestone from Lisbon—brought as ballast, which is cheaper than getting it from Rio Janeiro; and facing the river are a number of houses three stories high, some with staffs from upper balconies, from which droop consular flags. Elsewhere, dwelling-houses are usually one and two stories only. The favourite colour of Brazilians is green, and doors and windows, in fact every kind of wood-work, are as verdant as the forests that surround the town. Few shops boast of glass windows, on account of the deteriorative action of the sun upon goods exposed; but some wholesale firms exhibit a considerable variety of merchandise in their tunnel-shaped stores, where clerks are seen poring over ledgers in their shirt-sleeves. A seawall running the whole length of the river-frontage is in course of construction; and when finished, and the intervening space between it and the shore is filled up and built upon or paved, the appearance of the city will be decidedly enhanced, and its sanitary condition improved; for until recently, every kind of filth and rubbish was shot into the river, where at low-tide it generated a miasma enough to breed a pestilence.

Brazilians of social position rarely bring up their sons to trade, but strive to gain them government employ or entrance into one of the learned professions. It happens, however, that a university career is essential for the acquisition of a diploma; and as a large percentage of Brazilian youth entertain a hearty detestation for books, indulgent parents openly resort to influence, patron-

age, and intrigue, to enable their high-spirited though wonderfully delicate sons to live on the imperial exchequer. Paraense tradesmen are chiefly Portuguese; and it really is astonishing how rapidly one of these worthies gets on after his arrival in Pará; for he usually leaves the steerage of an English vessel with nothing but the clothes on his back, a strong constitution, and a bag of consecrated charms suspended from a string round his neck. Accustomed to hard work and poor fare at home, he considers himself well off with two mil reis or four shillings per diem; and as shibê or farinha and water is very filling, and goes down with a gusto if seasoned with an onion, he soon saves enough to purchase a horse and cart, or maybe send to Lisbon for a stout boat painted green and red. By thrift and economy his pile of mil rei notes steadily increases in dimensions; and one fine morning he opens a provision store and taberna, and begins to see his way to fortune. How complacently he smiles as he pours out vintems-worth of cashaça to negro labourers! How carefully he weighs bacalhão and farinha for stout Cafuza women (half Indian and negro), who balance basins upon the head, smoke short wooden-stemmed black-bowled pipes, and walk about bare-footed with light print skirts and no body! He knows the reckless native has no thought for the morrow, but spends his money as fast as it is received.

Shortly after my arrival in Pará I was invited by Mr Henderson, a Scotch merchant, to take up my quarters in his charming rocinha at the outskirts of Nazaré, where I remained a little over three months. Our house was large and roomy, with immense wooden window-shutters, which were kept open from early morning till we retired at night, so as to admit as much fresh air as possible. The rainy season had set in, and every day we were favoured with a tropical thunderstorm of more or less violence. I often watched the approach of these storms from the dining-room balconies of Ledue's hotel, which command a splendid view of the river. Distant peals of thunder herald the coming storm, and gusts of wind that rattle shrunken doors and whistle through crazy windows, impart a welcome freshness to the sweltering stagnant air. Steamships at anchor have their funnels covered with snowy conical caps, to keep out the deluge; barges taking in or giving out cargo are hastily covered with tarpaulin; streets become deserted, except by vehicles drawn by miserable horses, that firmly compose themselves for a doze till the down-pour passes over; while clouds of vultures fly against the gale, to inhale as much fresh air as possible after their ghastly repast. A steady approaching line of dense gray clouds with a ragged blue fringe diminishes the horizon; thunder-claps grow louder and more frequent; big drops patter upon the red-tiled roofs; and then falls a deluge upon house-tops, that rolls into the streets below in a perfect cascade. Anything beyond ejaculatory conversation is quite out of the question, for the noise is simply deafening; and although, from the vivid flashes of lightning, we know it is thundering big-guns, we hear nothing beyond the crash of rain.

While the tempest lasts we tumble into our hammocks and endeavour to escape drops that trickle between the tiles; and in half an hour

proceed to the balcony to see how matters look outside. The storm has passed over, and the horizon grows clearer; the islands in front are lit up with rays of golden sunshine, that stream through rifts in the leaden clouds upon the emerald expanse of forest; sleepy horses are awoken by drivers, who hit them over the nose with a stick and inquire what is ailing; foot-passengers with coloured umbrellas pick their way tiptoe amid miniature lakes, seas, and channels that flood the road; steamboats are the cleaner for their washing; vultures stand upon houses, palacios, and churches, with wings outstretched to dry; and by-and-by in the azure heavens float mountains of fleecy clouds that playfully emit flashes of lightning as they collide, until night draws near; and as the sun sinks beneath the western forests, pale stars peep forth, proclaiming the close of another day.

Mr Henderson's house was so far distant from Pará that no noise reached us from the city excepting the occasional crack of a rocket, a faint bugle-call, or gun-fire of a boat announcing the arrival of a foreign mail. The noise of insect life, especially during the middle watches of the night, imparted a sense of loneliness, of being shut out from the world. There was an incessant hum, chirp, burr, and whirr, and every now and then a bull-frog would 'Woof, woof!' smaller frogs shout 'Hoy, hoy, hoy!' night-birds fly over the roof, emitting weird shrill cries; and what with the kissing conversation of bats, bites of sanguinary carapanas or mosquitoes, the tickling sensation of jiggers in my toes, and the fear of being wound up by a scorpion, centipede, tarantula, or maybe poisonous snake, I frequently kept awake till towards morning, when thoroughly overcome with watching and fatigue, I would fall into a profound and refreshing sleep.

At daybreak we always had a cup of delicious fragrant black coffee; and while the heavy dew spangled every leaf and blade of grass, I frequently went for a walk down the newly cut roads into the forest, when I would be sure to be overtaken by the early train going out with female slaves and batches of children of all shades of black, white, and copper colour, to breathe the cooler air of the forest glades. In anticipation of the probable extension of the city, an immense area of forest has been divided into blocks by spacious parallel avenues, to be intersected by streets at equidistant right angles. The open spaces are covered with short capim or grass; but however much one may delight to stroll about in the shade, he is sure to have his legs covered with an almost invisible mite called moquim, that causes an itch almost enough to drive one frantic, especially at night; and very likely a number of carrapatos into the bargain. It is dangerous to scratch where moquim have settled, for running sores difficult to heal usually follow. I have seen Europeans and North Americans from the States with legs in a frightful condition, in fact lamed through scratching the skin till sore. An immediate, agreeable, and effectual remedy against moquim, though they be ever so numerous, is to sponge the body with cashapa, the common white rum of the country. Carrapatos differ in size. These tiny pests are about as large as a pin's head; and the horse tick about three or four times larger still. Both settle upon the clothes, or crawl up the legs,

laying hold of the flesh with serrated fangs, and adhering so tenaciously that it is impossible to remove them entire; and to leave a portion sticking to the skin is certain to produce an ugly sore. The best way to get rid of this loathsome acaride is to sponge it well with spirits of any kind, when it will soon drop off; a hint which may be useful to Europeans who are pestered with harvest-bugs.

The forest round Pará naturally strikes a European as superlatively grand. It is only, however, upon interior high lands that vegetation attains the height, dimensions, and luxuriance that captivate and bewilder the senses. It wholly differs from anything found in temperate climes; and the stranger never tires of new forms of life and beauty that momentarily meet his gaze, and indicate an exuberance and prodigality surpassing his grandest ideal home conceptions. Accustomed only to individual forms as seen in home conservatories, the mind becomes bewildered when countless specimens of equatorial growth are massed together. Instead of gnarled and knotted oaks whose venerable appearance denote centuries of battle against fierce autumn storms and icy northern blasts, there is a lithe youthfulness even about veritable giants; and though a tree may be dead and hollow within, luxuriance of verdant parasitical plants lends a charming illusion, and hides the fact from view. Light, heat, air, and moisture are essential for the proper development of the richer forms of parasitical life; hence on water frontage and in some of the quiet avenues where I loved to stroll, I observed exhibitions of lavish profusion which rather resembled the dreams of fairyland than the realities of actual life. In one spot, a compact mass of tiny foliage would drape a number of lofty trees to the ground; in another, eccentrically arranged festoons and garlands sprinkled with occasional scarlet and violet passion-flowers decorated some hundreds of feet without a single break; while further on, endless picturesque, artistic, and graceful combinations ravished the sight, and awoke reverential and exquisitely happy emotions.

On both sides of avenues near the trees the ground is closely covered with beautiful lycopodium moss. Its favourite place of growth is on shady clearings, though it seems to grow best where timber has been burned on the ground. A foreigner desirous of learning how to take forest bearings without a compass cannot do better than cut his way into one of the furthest blocks in the district beyond Nazaré. He knows he cannot be lost, from the fact of roads existing on every side; hence he may go to work deliberately, and be under no apprehension as to result. In these spots where undergrowth has not been touched will be found solitary specimens of the curatá, a pretty ground-palm that shoots a number of long fronds from the centre, in which stands a smooth slender spathe, employed in thatching. The broken stems of slim palms shew where young assals have been cut down for the sake of bunches of cherry-looking fruit employed in the manufacture of a refresco. Assai is drunk by everybody in Amazonia when they can get it, at all hours of the day and before and after meals. Five or six gallons of the fruit, each about the size of a marble, are usually piled in a large iron basin containing a requisite proportion of water; the mass is then worked over and over till the outer pulpy skin is worked off; the bare kernels

are taken out, and at the bottom remains a rich violet-coloured liquid, that may be imbibed *ad lib.* It is best mixed with farinha seca and sugar, and eaten with a spoon. A liking for it is soon acquired, and it is not considered good taste to refuse a cuya or calabash of assai when offered by a lady.

Every shrub, plant, and tree, and almost every blade and leaf of grass, is covered with insect life. Ants are the most common, and meet the eye everywhere. It is impossible to go far without coming across tumuli of hard mud four feet high; and huge coffee-coloured excrescences standing out upon the trunks of trees indicate where copim or white ants have taken up their abode. A few days after my arrival at Mr Henderson's, I noticed the front of our house was covered with what appeared to me to be streaks of mud; and feeling convinced they had not been there the day before, I proceeded to examine them, and found the lines were neatly constructed covered-ways. Myriads of white ants were travelling backwards and forwards; and no doubt a colony had made up its mind to devour as much of the wood-work as possible, and by way of change, shew students how to rapidly get through and digest good books. I saw two volumes of *Chambers's Information* which had been drilled by these indefatigable workers as neatly as though the holes had been punched by an awl. The covered-way hides the workers from quick-sighted insectivorous birds, especially woodpeckers. Domestic fowls, lizards, toads, armadillos, and tamanduas destroy vast numbers. The largest and most numerous ants I have seen were in the Campos between the Xingú and Tapajóz. Near the hill-slopes a few miles from Santarem, it is simply impossible to preserve a house from attack, and very frequently a huge nest actually hangs from the ridge-pole. The ant, however, which attracts most attention is the saúba. It marches in columns, each member carrying a triangular or circular section of a leaf larger than itself. The only way to turn them from a garden is by sweeping the track with a flaming branch for a distance of forty or fifty yards; but as new excursions will probably be made during the night, one often finds that they have paid a visit and departed, leaving perhaps a favourite orange tree entirely denuded of foliage. A big ant called the tuacandera is very common just outside Pará; indeed it is hardly possible to walk many yards in the forest without meeting it: the bite inflicts excruciating agony. I have never been stung by a scorpion or bitten by a centipede; but I have been nipped by a tuacandera, and can quite believe that the pain inflicted is more severe than that of either of the two former.

What with the uproar of cicadas, chirping of grasshoppers, screaming of parrots, cawing of araras or macaws (the cry of this splendidly plumaged bird closely resembles *arra, arrra*, hence its name), plaintive notes of jayin and toucans, and numerous other indescribable sounds, the attention of the new-comer is kept continually upon the ~~gust~~ *gust* until eleven o'clock, when the intense oven-like heat warns him it is time to return. Emerging from the forest into one of the avenues the sun will be found nearly overhead; lizards of all sizes—that is to say from three inches to four feet in length—dart across the path and scuttle into the bush; and here and there a snake has to be guarded against, and if need be killed, with

the short sapling which every pedestrian ought to carry. Upon reaching home I usually took a bath, had a substantial breakfast, and rested till the unfailing thunderstorm cooled the atmosphere.

A QUEER CLUE.

IN TWO CHAPTERS.—CHAPTER II.

I HAD left the police altogether, and was living very comfortably, my good lady and I, up at Islington, in the same street with my married daughter, who was doing very comfortably too, her husband having a good berth in the City. I had always been of a saving turn, and had bought two or three houses; so with a tidy pension, which I had earned by thirty years' service, I could afford to go about a bit and enjoy myself. Of course in all that time I had made the acquaintance of a good many professional people; and there were very few theatres or exhibitions that I couldn't get admission to. We—my wife and I, I mean—made it a rule to go everywhere that we could get tickets for; and whether it was the launch of a ship, the charity children at St Paul's, or Sam Cowell at the Canterbury Hall, it didn't matter to us; we went. And it was at the Canterbury I first had the Combestead murder more particularly recalled to my mind.

I was there by myself, the old lady not being willing to leave my married daughter—because, well, it was in consequence of her being a married daughter—so I went by myself. There was a young woman who sang a comic version of *There's a good Time coming* splendidly; and as I was always of a chatty turn, I couldn't help remarking to the person that was sitting next to me how first-class she did it, when he exclaimed: 'Hollo! why, never! Superintendent Robinson?' And then he held out his hand.

It was young Lytherly, but so stout, and brown, and whiskery—if I may say so—that I didn't know him.

'Mr Lytherly!' I exclaimed, 'I didn't expect to see you; and you're right as to my being Robinson, although police officer no longer. Why, I thought you were in the army.'

'So I was,' he returned; 'but I'm out of it now; and I'll tell you how it was.'

It seems he had been to India, and got some promotion after three years' service; and had the good fortune to save his colonel from drowning, or what was more likely in those parts, being taken down by a crocodile, under circumstances of extraordinary bravery. He did not tell me this last bit, but I heard so afterwards. Lytherly was always a wonderful swimmer, and I remembered his taking a prize at London. The exertion or the wetting brought on a fever, and he was recommended for his discharge. The colonel behaved most liberally. But what was the best of all, the old fellow who kept the canteen at the station died about this time, and Lytherly had been courting his daughter for a good bit, more to the girl's satisfaction than that of her father; so then they got married, and came home to England, and he was tolerably well off. He naturally talked about the Combestead murder, and said frankly enough, that—except the people with whom he lodged, and *they* were suspected, he said, of perjury—he thought I was the

only person in the town who did not believe him guilty of the murder.

'But murder will out, Mr Robinson,' he said; 'and you will see this will be found out some day.'

'Well, I am sure I hope it will, Mr Lytherly,' I answered him. 'But as for "murder will out" and all that, I don't think you will find any policeman or magistrate who will agree with you there; and there was less to help us when you had got out of the scrape in this Combested business, than any affair I was ever concerned in.'

'I don't care,' he says; 'it will come out, Mr Robinson. I dream of it almost every night; and my wife consulted some of the best fortune-tellers in India, and they all told her it would be discovered.'

'Hum!' I said; 'we don't think much of fortune-tellers here, you know.'

'I'm perfectly aware of that,' he says; 'and I shouldn't give them in as evidence; but if you had lived three years in India with people who knew the native ways, you might alter your mind about fortune-tellers. Anyway, you will remember, when it's found out, that I told you how it would be.'

I laughed, and said I should; and after we had had another glass together, and he had given me his address and made me promise to call on him, we parted.

I told my wife all about it; and it is very curious to see how women are all alike in curiosity and superstition and all that; for although my wife had been married to me for thirty years, and so had every opportunity of learning better, yet she caught at what young Lytherly—not so very young now, by-the-by—had said about these fortune-tellers, and was quite ready to believe and swear that the murder would be found out. It's no use arguing with a party like that; so I merely smiled at her, and passed it off.

It was the very next day that Mrs Robinson and myself had agreed to go and see a new exhibition of paintings which some one was starting in London, and tickets were pretty freely given away for it; but the same reason which stopped my wife from going to the Canterbury, stopped her from going to the exhibition. I went, of course, because I couldn't be of any use, under the circumstances, to my married daughter; and a very good exhibition it was too. There were plenty of paintings, and I had gone through all the rooms and entered the last one. There were very few persons. I was sorry to see, in the place, so that you could have an uninterrupted view of any picture you pleased. After glancing carelessly round the room, for one gets a kind of surfeited with pictures after a bit, I was struck by a gloomy-looking painting to the left of the doorway, and which I had not noticed on my first entry. When I came to look closer into it, I was more than struck—I was astounded. It was a picture representing the finding of old Trapbois the miser, in the *Fortunes of Nigel*. The heavy dull room was lighted only by the candle which the young nobleman held above his head; and it appeared to be excellently painted. But what drew my attention was that, as a part of the confusion in which the struggle between the old man and his murderers had placed the room, the washstand had been upset, had fallen into the fireplace, and the ewer had rolled into the grate, where it was shewn as unbroken, although the water was flooding the boards—all exactly as I had

seen the same things five years before—so exactly, that I was perfectly sure no chance coincidence had produced the resemblance, but that whoever had painted this picture had seen the room where Miss Parkway was murdered, and had had the features of the scene stamped on his memory. Who so likely to have the scene so stamped, I instantly thought, as the murderer himself? As this rushed on my mind, I could not repress an exclamation, although pretty well guarded as a rule. The only other person in the room heard me, and came to see what had excited me so strongly. Apparently, he was disappointed, for he looked from the picture to his catalogue, then to the picture again, then at me, back to his catalogue, and then went away with a discontented grunt. I did not move, however, but remained quite absorbed in the study of this mysterious painting; and the more I looked, the more convinced I became that it was copied from the scene of Miss Parkway's murder. There were several little points which I had not at first noticed, and in fact had quite forgotten; such as the position of the fire-irons, the direction in which the water had run, and so forth, which were all faithfully shewn in the picture. To be brief, I had made up my mind before I left the room that I had at last found the real clue to the Combested murder.

The artist's name was Wyndham; and I determined that I would very soon, as a natural beginning, make some inquiries about this Mr Wyndham; and indeed I began before I left the exhibition. I engaged the hall-keeper to have a glass with me at the nearest tavern, and when I got fairly into conversation with him, asked carelessly where Mr Wyndham lived, as I thought I had known him many years ago, giving a description of some entirely imaginary person. The hall-keeper said: 'No—that was not the sort of man at all. Mr Wyndham was' (here he described him); 'and he doesn't live at the west-end of London, as you said, sir, but at a place in Essex, not very far from Colchester.' He knew where he lived, because he had several times posted letters to him at 'The Mount.' This was about all I got from the hall-keeper, but it was as much as I wanted.

I am not greatly in the habit of taking other people into my confidence, but this was altogether an exceptional case; so, after a little reflection, I went straight to the address John Lytherly had given me, and told him what I had seen. He of course introduced me to his wife, a very pretty dark-eyed young woman; and when I had told all, they exchanged looks less of surprise than triumph. 'Oh, it is coming all right!' he exclaimed. 'I knew the murder would cry out some day. And now you will have a little more respect for Indian fortune-tellers.'

'I am not quite sure about that,' I said. 'But don't you go making so certain that we are going to find out anything, Mr Lytherly: this may be only an accidental resemblance.' Because, as you may suppose, I had not told them how confident I felt in my own mind.

'Accidental! Nonsense!' was all he said to that; and then he asked me what was the first step I proposed to take. I told him that I thought we ought to go down to this village and see if we could learn anything suspicious about Mr Wyndham; and by my old detective habits, and the way in which the officers about would be

sure to help me, I thought we might reckon on finding out what was wanted. He was delighted, and asked when we should start, and when I said that very night, he was more delighted still.

It is always my rule to strike the iron while it's hot, and nothing could possibly be got by waiting now; so I had made up my mind just to run home, get a few things in my bag, and go down by the ten o'clock train. My wife, you may be sure, was very much astonished; but, as I expected she would be, was just as confident in the murder being found out as young Lytherly himself. Of course the latter was ready. And we were put down at our destination about twelve o'clock; too late for anything that night, but still we were on the spot to begin the first thing in the morning. And accordingly directly after breakfast we began. John Lytherly would have begun before breakfast, but as an old hand I knew better than that; because the party we were after, allowing he was the right party, after a five years' rest, wasn't going to bolt now; so it was no case for hurrying and driving. Well, soon after breakfast, I sauntered into the bar, and began talking with the landlord, who was an elderly sort of party about my own age, and who bragged—as if it was a thing to be proud of—before we had talked three minutes, that he had lived, man and boy, in Chumpley, which was the name of the lively place, for more than fifty years.

'Then you're just the fellow for me,' I thought; and then began talking of an old master of mine who was now living somewhere down in this neighbourhood, by the name of Wyndham.

'Wyndham? Let me see; Wyndham?' says the landlord, putting on his wisest look. 'No; I can't remember any party of that name. There's Wilkinson, and Wiggins; perhaps it's one of them.'

I told him they would not do; and then added, that the party I meant was something of an artist, painted pictures partly for pleasure and partly for profit. This was only a guess of mine, but it was a pretty safe one.

'Oh! there's lots of them about here!' exclaims the old boy, grinning very much, as if it was a capital idea. 'There's Mr De Lancy Chorkle, Miss Belvidera Smith, Mrs Galloon Whyte, Mr Hardy Canute, and a lot more; but I don't think there's a Wyndham.'

'Ah, well, it don't matter,' I said, very carelessly still; 'I may be mistaken. I heard, however, he lived down here at a place called the Mount. Is there such a place?'

'Is there such a place!' says the landlord, with as much contempt in his voice as if I ought to be ashamed of myself for not knowing. 'Yes, there is; and a first-rate gentleman artist lives there too; but his name ain't Wyndham; his name happens to be Parkway, sir, Mr Philip Parkway; though I have heard that he is too proud to paint under his own name.'

'I think, landlord,' I said, 'that I'll have just three pennorth of brandy, cold;' which I took, and left him without another word, for when I heard this name, I felt struck all of a heap, because it made a guess into a certainty, though in a way I had never dreamt of. I couldn't even go back to Lytherly for a little while; it was all so wonderful; and I was so angry with myself for never having thought at the time that the man who, of all others in the world, had the most to gain by

the poor woman's death, might have been the one who killed her. In the bitterness of my feeling I could not help saying that any one but a detective would have pounced upon this fellow at the first. However, I got over the vexation, and went back to Lytherly to tell him my news. We were each very confident that we had the right scent now; but yet it was not easy to see what we were to do. I could not very well apply for a warrant against a man because he had painted a picture; and so we walked and talked until we could think of nothing better than going down to Combestead, and with our fresh information to help us, seeing if we could not rake up something there.

We came to this resolution just as we reached a toll-gate, close by which stood a little house, which appeared to be the beer-shop, baker's, post-office, and grocer's for the neighbourhood. Not much of a neighbourhood, by-the-by, for, excepting a few gentlemen's seats, there was hardly another house within sight. One small but comfortable-looking residence, we were informed by the chatty old lady who owned the 'store,' was the Mount, where Mr Parkway lived. He was a very retired, silent sort of a gentleman, she said, and people thought his wife didn't have the happiest of lives with him. He had been married for a few years, the old lady went on; soon after a relation had died, and left him a good bit of money. Before that he only rented apartments in the village; but then he married Miss Dellar, who was an orphan, with a good bit of money too, but quite a girl to him, and they went to live at the Mount. At this point the old lady broke suddenly off, and said: 'Here they are!' going to the door immediately, and dropping her very best courtesy. We followed her into the little porch; and there, sure enough, was a low carriage, drawn by one horse, and in it sat a gloomy dark man, whom I had no difficulty in recognising, and by his side a slight, very pretty, but careworn-looking young woman. Mr Parkway looked coolly enough at us, and we as carelessly returned his glance, for we were both so much changed since the Combestead days, that there was little fear of his remembering us.

It seemed they had called about a servant which the post-office keeper was to have recommended, and Mrs Parkway alighted from the carriage to write some memorandum on the business. Parkway had never spoken, and I thought I could see in his harsh features traces of anxiety and remorse. Lytherly had followed Mrs Parkway into the shop, and, as I could see from where I stood, on the lady asking for a pen, he drew his gold pencil-case from his pocket, and offered it, as probably containing a better implement than any the post-office could afford. The lady stared, looked a little startled, but after a moment's hesitation accepted it with a very sweet smile. While Mrs Parkway was engaged in writing her letter, Lytherly stood by her side, and sauntered out after her. I had been waiting in the porch, watching her husband, whose face was so familiar to me that I half expected to see a look of recognition come into his eyes; but nothing of the sort happened. Lytherly watched them drive off, then turning suddenly round, exclaimed: 'It's as good as over, Robinson! We've got them!'

'Why, what is there afresh?' I asked.

'Just sufficient to hang the scoundrel,' said Lytherly. 'You remember, of course, that among

other things which were stolen on the night of the murder was a curious locket which poor Miss Parkway used to wear, and that some fragments of the chain were afterwards found.'

I remembered this very well, and told him so.

'Very good,' he continued. 'I gave that locket and chain to the poor old girl: it was the only valuable I possessed in the world; and Mrs Parkway has the central carbuncle in her brooch now.'

'Nonsense!' I exclaimed, not knowing exactly what I did say at the moment.

'It is a fact,' he said; 'and I can swear to it. What is more to the point, perhaps, is, that although the stone is in a strange setting, and no one but myself, probably, could recognise it, yet I can identify it. On the side are my initials cut in almost microscopical characters. If they are there, that settles it; if they are not, put me down as an impostor, and fix the murder on me if you like.'

There was a good deal more said after this, but the upshot of it was that we went over to Colchester, and laid the matter before the authorities; when after a little hesitation, a warrant was granted for the apprehension of Mr Philip Parkway; and two officers, accompanied by Lytherly and myself, went over to execute it.

It was after nightfall when we arrived at the Mount; and on knocking at the door, we found that Mr Parkway was in; but his wife was out, having gone up (so the elderly woman that was called by the footboy informed us), to play the harmonium at the weekly rehearsal of the village choir. 'About the only amusement she has, poor thing,' the woman muttered, and she seemed in a very bad temper about something. We said we wanted to see her master, and that she need not announce us. And, as I live, I believe that woman guessed directly who we were, and what we had come for. At anyrate, quite a glow of triumph came into her face, and she pointed to a door nearly opposite to where we stood. We opened it, and found ourselves in a sort of large study, where, seated at a table, reading, was the man we wanted. He looked up in surprise as we entered, and the light falling strongly on his face, while all the rest of the room was in darkness, I thought I saw a paleness come and go on his gloomy features; but that might have been fancy. 'What is your business?' he began; but Mr Banes the chief constable cut him short.

'I am sorry to inform you, Mr Parkway,' he said, 'that I hold a warrant for your arrest, and you must consider yourself in custody.'

Parkway stared at him, mechanically closed the book he was reading, and said: 'On what charge, sir?'

'For murder,' says Banes; and then I was sure Parkway did turn very white. 'For the murder of Miss Parkway, at Combestead, in 186-.'

Parkway looked from one to the other of us for a few seconds without speaking; at last his eyes settled for an instant on Lytherly; then turning to Banes, he said, pointing straight at Lytherly: 'It was that man, I have no doubt, who set you on.'

'You had better not say anything, sir,' said the chief constable, 'but just give your servants what orders you wish, and come with us, as we cannot stop.'

'I daresay it was he,' continued Parkway, not answering Mr Banes, but seeming to go with his own thoughts. 'I fancied he was dead, for

what I took to be his ghost has been in my room every night for this month past.—Where is my wife?'

We told him she was not at home, and that we were anxious to spare her as far as possible; but he gave such a bitter smile, and said: 'She will certainly be vexed to have had a husband that was hanged; but she will be glad to be a widow on any terms.'

We didn't want to hear any more of this, so got him away; not without some little trouble though; and if there had not been so many of us, we should have had a scene; as it was, we were obliged to handcuff him.

The servants, four of them, were naturally alarmed, and were in the hall when we went out. Mr Parkway gave a very few directions, and the elderly woman grinned quite spitefully at him.

'Don't insult the man, now he's down,' I said in a whisper while Parkway and the two officers got into the fly. Lytherly and I were to ride outside and drive.

'Insult him! the wretch!' she said. 'You don't mean to suppose he has any feelings to hurt. He has been trying to drive my poor young mistress—that I nursed when a baby—into her grave, and he would have done it, if I had not been here. The only excuse is, he is, and always has been, a dangerous lunatic.'

We drove off, and I saw no more of her, and never heard how Mrs Parkway took the intelligence.

The lady was present at the preliminary examination; and to her great surprise her carbuncle brooch was taken from her and used against her husband. This examination was on the next morning, and we obtained more evidence than we had at first expected. Not only was the carbuncle marked as Lytherly had said it would be, but I had been up at the station, being unable to shake off old habits, and had made some inquiries there. Strangely enough, the man who was head-porter now had been head-porter there five years ago (it is a very sensible way railways have of keeping a good man in the same position always; promotion generally upsets and confuses things); and he was able, by secondary facts, to fix the dates; and to shew that not only did Mr Parkway go to Combestead for the funeral, but that he went to London and back just before; from London, of course, he could easily get to Combestead, and his absence left him about time to do so. We proposed then to have a remand and get evidence from Combestead; but it was never needed.

Parkway had been expecting this blow for years, and always kept some deadly poison concealed in the hollow of his watch-seal. This he took, on the night after his examination, and was found dead in his cell by the officer who went the rounds. He first wrote a very long and minute confession, or rather justification, shewing that his motive had been to prevent his cousin's marriage with Lytherly, whom he seemed to hate very much, although the young man had never harmed him. He said he went expressly to Combestead to get possession of the money his misguided relative had drawn, and to kill her. He felt that if he left her alive, she would carry out her scandalous plan, and therefore it was his duty to kill her; so in doing this he felt he had committed no crime, but had only been an instrument of justice. So

I suppose he was, as the housekeeper declared, a dangerous lunatic.

However, the reward of one hundred pounds had never been withdrawn, and I got it; it was paid out of Parkway's estate too, which was about the strangest go I ever heard of. Lytherly and his wife are great friends with Mrs Robinson and myself; indeed we have usually one of their young ones staying with us, when we haven't one or two from my married daughter. Mrs Parkway, I heard, sold off at the Mount, and went away; and some time after I saw by the papers that she was married to some one else. I hope she made a better match the second time.

On the whole, on looking back I am inclined to think that of all the clues by which I found anybody out, this was really the queerest.

THE MONGOOSE.

WE some time ago published an account of that deadly snake the Cobra, from the pen of a now well-known writer on Indian sports. In that paper it was given as the opinion of Dr Fayer, author of a splendid work on Indian poisonous serpents, that a human being if bitten by a cobra in full vigour, was entirely beyond the reach of any known antidote; death was certain. In the following paper, which is from the pen of the author of the article above mentioned, some curious facts are adduced relative to the mongoose or ichneumon, an animal which is credited in many parts of India with being proof against snake-bite! With these few words of introduction, we leave our sporting friend to describe the little creature.

In countries where snakes and other noxious reptiles abound, nature, as a means of checking the excessive increase of such plagues, has provided certain animals, both biped and quadruped, which, by continually preying upon and destroying snakes of all kinds, both large and small, fulfil a most useful office, and confer an inestimable benefit on man. The peccary of South America, a small but fearless species of the hog-tribe, will not flinch from an encounter with such a terrible foe as the deadly rattlesnake; but encased in a hide of extreme toughness, quickly despatches and devours his scaly antagonist. The Secretary bird of Southern Africa, belonging to the falcon tribe, habitually subsists on reptiles of all kinds. In Europe the stork acts a similar part; and many other useful birds and beasts, performing the same good work, might be mentioned.

In India, where serpents are specially common and destructive to human life, we have various kinds of snake-devourers, such as storks and cranes and the well-known adjutant. Peafowl are especially active in destroying small descriptions of snakes; and others of the feathered race assist in the work. But in general, animals of all kinds have a natural dread, and carefully avoid permitting themselves to come in contact with, or even close proximity to a member of the snake-tribe, instinctively aware of the danger of meddling with such creatures.

The little ichneumon (a Greek word signifying a follower of the tracks or footsteps) or mongoose of India, is, however, a bright exception to this rule, for not only will he, when so disposed, without fear of consequences readily enter into mortal combat with the most venomous descriptions of snakes, but will even seek them out, attack, slay, and devour them, their young, or eggs, in their various strongholds and hiding-places.

The common gray mongoose (*Herpestes griseus*), called by the natives of Northern India 'Néweld,' is exceedingly abundant everywhere. In general shape and contour, though not in colour, it is much like a ferret, and in many other ways resembles one of the weasel tribe. In size it is considerably larger than a ferret; and the hair which covers the body, instead of lying smooth and feeling soft to the touch, as that of the ferret, is coarse and bristly. The colour, which varies much in different parts of the country and according to the season of the year, is generally of a reddish brown, speckled over with gray. Its length from tip of nose to tip of tail is about two feet. The snout is sharply pointed, ears short and round, eyes small and piercing; the jaws are armed with a formidable set of teeth, the canines being especially sharp and long.

The mongoose frequents gardens, thick hedges, rows, and scrub jungle; and if left unmolested, and not hunted by dogs, will often take up its abode in some burrow or hole in a bank in close proximity to inhabited buildings. Though in general nocturnal in habits, yet it may often be seen crossing a road or footpath during the day, usually pausing a moment to look around and make sure that the coast is clear of dogs and such-like enemies before venturing to cross open ground. It possesses in common with the weasel tribe the habit of constantly sitting up on its hind legs to listen or obtain a better view around. I never, however, have observed it *footing* in this position, like a squirrel, as has been stated to be the case. The mongoose has not the wandering propensities of the weasel tribe, one day here, the next miles away, but takes up its residence and remains in one particular spot, to which it returns, after roaming through the country around in search of food. A single animal, sometimes a pair, is usually seen at a time, seldom more; and I have never myself beheld, or heard of, large numbers travelling together, as we know stoats and weasels not unfrequently do. Though seldom if ever known to ascend trees, even when pursued by an enemy, the little creature may frequently be seen hunting about on the roofs of outhouses or deserted buildings of no great height, to which it has ascended probably by means of holes in the walls; but strictly speaking, the mongoose is not a climber, like the squirrel and marten.

Our little friend has been described as an excellent swimmer; but I imagine that it does not readily take to water, for I have never seen it swimming across streams or pools, though the banks of rivers, especially when honeycombed with

rat-holes, and affording cover to the animal's usual prey, are much frequented by it. It is an exceedingly courageous creature, and capable of inflicting severe punishment on animals far larger than itself, with its formidable teeth. A full-grown and powerful Tom-cat belonging to my regiment, the terror of all the squirrels in the neighbourhood, was worsted and most severely mauled in an encounter of his own seeking with a harmless mongoose. The latter surprised in the first instance and hard pressed by his opponent, turned on his assailant, and bit him through the face, inflicting so severe a wound, extending as it did from the corner of the eye to the mouth, that the aggressor was compelled to beat a retreat, having caught a regular Tartar. For many weeks we all thought that the sight of the injured optic was destroyed, though eventually the contrary proved to be the case; but puss for ever after carefully avoided seeking a quarrel with such an undaunted little champion.

The mongoose at times is mischievous; and not unfrequently during the night invades the poultry-yard; and when intent on making an entrance into a hen-roost, is a difficult thief to keep out, for the creature manages to creep through very small openings and crevices. Having once succeeded in forcing its way in, the mongoose, like many others of its tribe, not content with obtaining a single fowl sufficient to furnish a hearty meal, is given to the bad habit of slaying half a dozen or more unfortunates, which it never attempts to carry off, but leaves scattered about the floor.

In spite, however, of such small 'peccadillos' and insignificant petty thefts, which I believe are the sum-total of crimes which can be with justice laid to the charge of the little animal, the mongoose, on account of its many admirable qualities and the exceedingly useful office it fulfils, should ever be encouraged and protected by man. Not only does it continually hunt for and prey upon reptiles of various kinds devouring their young and eggs alike, but cobras and other venomous snakes on becoming aware of such an active and dreaded little adversary being in their midst, speedily leave such a neighbourhood, and betake themselves to other and safer quarters; and as we know that the smell of a cat suffices to keep away rats and mice from our dwellings, so in like manner will a mongoose, by continually prowling about a house, in a great measure free the premises from snakes, rats, mice, and such vermin.

The mongoose in its wild state, if kindly treated, fed with milk, and made a welcome visitant, speedily loses its natural fear of human beings, and not only will pass along the veranda of a house, but if unmolested, soon learns to cross from one room to another by an open door or window. When captured young, it is very easily reared and domesticated, and soon becomes familiarised with the loss of liberty. It is cleanly in its habits, and has no offensive odour pertaining to it, like many of its tribe. It will trot about after its owner like a dog or cat, and even permit children to handle or play with it, without attempting to bite or scratch them. I have seen one curled up asleep in a lady's lap. They are special favourites of the British soldiers in the barracks, and dozens of such pets may be seen in a single building.

Being, as I have already stated, a deadly foe to

the cobra, battles between that formidable reptile and the mongoose are of constant occurrence; but I never have had the good fortune to witness a combat between the two animals in *their wild state*, though I have several times seen large and formidable snakes despatched within a few minutes of the commencement of the fight, by tame ichneumons; and I imagine that the tactics employed on both sides are much the same whether the champions have casually met in the jungle, or the duel has been arranged for them by human beings.

In the various encounters which I have personally witnessed between mongoose and cobra, the former invariably came off the victor, and that without apparently receiving a wound. The little animal always adopted the same tactics, vigorously attacking the snake by circling round it and springing at its throat or head, but at the same time with wonderful skill and quickness avoiding the counter-strokes of its dangerous enemy; till at length waiting for a favourable opportunity—when the snake had become to a certain extent exhausted by its exertions—the nimble little quadruped would suddenly dart forward, and, so to speak, getting under its opponent's guard, end the fight by delivering a crunching bite through the cobra's skull.

In none of the half-dozen battles which I have witnessed has there been an attempt on the part of the mongoose to 'extract the serpent's fangs' (as some recent writers have described); though more than once, after gaining the victory, the animal has commenced to ravenously devour its late opponent. Possibly these poor creatures, that shewed so inordinate a desire for food, had been intentionally starved for the occasion by their owners, to make them the more eager to engage and overcome the cobra so soon as let loose, and thus without fail or delay to insure a pitched battle for the benefit of the spectators.

As the reader is probably aware, these combats between mongoose and cobra have given rise to many differences of opinion and disputes among naturalists; though I think that the careful inquiries and numberless experiments made by scientific men in late years have done much to clear up these old points of contention, and at the same time have put to flight many delusions no longer tenable. For instance, a common belief formerly prevailed that a mongoose, when bitten in an engagement with a cobra or other venomous snake, was in the habit of eating some kind of plant or root, which altogether nullified the effects of the poison. This extraordinary idea yet prevails in some parts of India among certain classes of natives, who to this day maintain that the mongoose, by means of some such specific as I have mentioned, works a self-cure when bitten by a venomous reptile. But it is a well-known fact that many tribes and castes are exceedingly superstitious and obstinate, pertinaciously clinging to the convictions, maxims, and customs handed down to them by their forefathers; and with such people it is, generally speaking, useless to enter into an argument.

We shall now proceed to consider a second and far more difficult point to determine, and which, I think, yet remains a vexed question, requiring further investigation. I refer to the supposition, which many maintain, that the poison

from the fangs of venomous snakes, though so fatal in its results with most living creatures, is *innocuous to the genus to which the mongoose belongs*, and that one of these animals, beyond suffering pain from the bite of a cobra, sustains no further harm or inconvenience.'

Many strong and weighty arguments have been urged in support of this theory; and perhaps the most remarkable that has ever been brought before the public appeared many years ago in an article published in the *Churchman's Magazine*, entitled 'A Question in Natural History settled at last.' The writer, after ably sustaining his view of the question, concludes by publishing at length a most interesting communication from India, giving a detailed account of a prolonged and bloody engagement between mongoose and cobra. This letter was signed by three officers of the Indian army, witnesses of the combat, and who vouched for the strict accuracy of the report. The particulars of this desperate duel, which actually lasted three-quarters of an hour, with the various changes and incidents as the combat proceeded, are minutely described; but after a gallantly contested battle, the mongoose proved the victor, and the cobra was overcome and slain. The former, however, did not come off scathless, but, on the contrary, received several wounds, including one of great severity.

When the encounter was over, the witnesses proceeded to carefully examine, with a magnifying glass, the wounds which the mongoose had received, in order to ascertain and satisfy themselves of their extent and nature; and mark the important discovery brought to light by aid of the lens. I will quote the concluding words of the narrative: 'On washing away the blood from one of these places the lens disclosed the *broken fang of the cobra deeply imbedded in the head of the mongoose*. . . . We have had the mongoose confined ever since (now four days ago), and it is now as healthy and lively as ever.'

It cannot be denied that such clear and trustworthy evidence as this carries considerable weight with it, and tends to bear out the writer's view of the question. On the other hand, to deal impartially, it is right to point out one or two weak points in carrying out this otherwise well-conducted experiment, and which somewhat detract from the results and consequent opinions arrived at.

In the first place, we are told that the cobra was only three feet long, undoubtedly a very small one; and further, that previous to engaging the mongoose, to make sure that the reptile was in full possession of its fatal powers, it was made to bite a fowl, which died soon after. This certainly clearly proved that the snake's deadly machinery was in full working order. But the experimentalists appear to have forgotten that by this very act they were in a measure disarming the cobra, for it is a well-known fact that the *first* bite of a venomous snake is most to be feared; and that a second bite by the same reptile, if delivered shortly after the first, owing to the poison having been partially exhausted by the first effort, is less deadly in its effects.

So that, all things considered, and fully allowing that this account strengthens the assertion that the mongoose is really proof against the effects of snake-poison, I am yet of opinion that the question is not finally and conclusively settled, more

especially as later experiments, quite as fairly and carefully carried out, have terminated differently, and resulted in the death of the plucky little fellow.

SOME CURIOUS COINCIDENCES.

It has often been jocularly said that no family can have any right to call itself 'old' unless it has its 'family ghost.' As regards the Highlands of Scotland, we may substitute for the ghost the inevitable 'doom,' or prediction foretelling future weal or woe to the family. Almost every old Highland house has its 'prophecy' of this kind, such as the Argyll and Breadalbane predictions, the 'Fate of Seaforth,' the 'Fall and Rise of Macleod,' and many others well known in the north. The great majority of the families so gifted have had of course no events in their history that even the credulity of their retainers in the past could twist into a fulfilment of the predictions; but in a few cases there have been some curious coincidences between the old traditions and the facts of a later time.

We propose to select one or two well authenticated instances of such coincidences from among a mass of Highland superstition in a little book that has recently been published at Inverness entitled *The Prophecies of the Brahan Seer*, by Alexander Mackenzie (Inverness: A. and W. Mackenzie). This pamphlet is a collection of most of the traditional 'prophecies' attributed to an apocryphal Ross-shire seer of the seventeenth century, and which have been handed down by oral tradition from generation to generation in the Highlands since that time. In the north, the popular faith in this prophet *Goinneach Odhar* or 'Dun Kenneth' and his predictions has been and is both strong and wide, says Mr Mackenzie, who thinks the legends worthy of preservation, as an additional chapter 'both remarkable and curious, to the already extensive history of the marvellous.' At anyrate, these legends are of some interest as illustrations of the superstition and credulity of the Highlanders of the last century, and perhaps even of this; but our purpose leaves untouched the wilder traditions in this collection, and deals only with two episodes in the histories of two great families of the north.

Sir Edmund Burke in his *Vicissitudes of Families* has a weird chapter on 'the Fate of Seaforth,' in which he gives at full length the doom of this family, as pronounced by the 'Warlock of the Glen' (as Sir Edmund calls Dun Kenneth), and its fulfilment a century and a half after it was spoken. Burke seemingly accepts as fact (as does Mr Mackenzie) the purely mythical story of the seer and his cruel fate—how, being a clansman of Seaforth, and famed for his prophetic skill, he was called on by his chief's wife to explain why her husband staid so long in Paris, whither he had gone on business soon after the Restoration; how the Warlock, unwilling at first to tell what his uncanny gift shewed him, at last was forced to say that the Lord of Kintail was forgetting home and Lady Isabel in the smiles of a French lady; how the angry countess, furious that he should have so slandered his chief before his clansmen, ordered the seer to be burned to death—another instance of the proverbial 'honour' in which prophets are held in their own country. As he was dying at the stake, Kenneth uttered a

weird prediction foretelling the downfall of the Seaforth for Lady Isabel's crime. So runs the legend. It is quite certain that a prediction regarding the Seaforth family was well known in the Highlands long before the days of the last chief of Kintail. We have Lockhart's authority for the fact that both Sir Humphry Davy and Sir Walter Scott knew and believed it. 'I do fear the accomplishment of the prophecy,' writes Scott in another place to his friend Morritt of Rokeby, who himself testifies that he heard it quoted in the Highlands at a time when Lord Seaforth had two sons both alive and in good health. This prediction ran, that the house of Seaforth would fall when there should be a deaf and dumb eurl who should sell Kintail (the 'gift-land' of his house); that this eurl would have three sons, all of whom he should survive; that four great Highland lairds, his contemporaries, should each have certain physical defects, which were named; that the Seaforth eurl should go to 'a white-hooded lassie from the East,' who should be the cause of her sister's death.

With all these particulars the facts coincided exactly. Francis Humberstone Mackenzie, the last Seaforth, became deaf from an attack of fever while at school, and latterly also became dumb. His remarkable life is well known: he raised from his clan the 78th Highlanders, and subsequently rose to be a lieutenant-general in the army and governor of various colonies. Scott, whose great friend he was, says he was a man 'of extraordinary talents, who must have made for himself a lasting reputation, had not his political exertions been checked by painful natural infirmity.' He was the happy father of three sons and six daughters, all of high promise; but the end of his life was darkened by misfortunes. Two of his sons died suddenly; and in 1814, William, his last hope—M. P. for his native county, and a young man of great abilities—tokened of a lingering disease, and died about the time that losses in the West Indies necessitated the sale of Kintail. In January following, the old man, broken-hearted at the loss of his three sons, died; and then, as Scott says:

Of the line of Mackeneth remained not a male
To bear the proud name of the chiefs of Kintail.

The estates went to his eldest daughter, the widow of Admiral Sir Samuel Hood, who was on her way home from India when her father died. The four Highland lairds, friends of Earl Francis, were all distinguished by the peculiar personal marks which were mentioned in the prediction; and to make the coincidence complete, Lady Hood—then Mrs Stewart Mackenzie—many years afterwards may be said to have been the innocent cause of her sister's death, for when she was driving Miss Caroline Mackenzie in a pony-carriage, the ponies ran away, the ladies were thrown out, and Miss Mackenzie killed!

So much for this strange chapter in family history. Let us now glance at the records of another family—equally famous in the Highlands—where the prediction, as a whole, has not been fulfilled, though enough has happened here also to make the coincidence very striking. Our authority in this case is the Rev. Norman Macleod, father of the late Dr Norman Macleod. In the appendix to Dr Norman's *Life* by his brother are given a series of reminiscences dictated in his old age by their father. He says that in the summer of 1799

he visited Dunvegan Castle in Skye, the old stronghold of the Macleods. 'One circumstance took place at the castle on this occasion which I think worth recording, especially as I am the only person now living who can attest the truth of it. There had been a traditional prophecy, couched in Gaelic verse, regarding the family of Macleod, which on this occasion received a most extraordinary fulfilment. This prophecy I have heard repeated by several persons. . . . It was prophesied at least a hundred years prior to the circumstance I am about to relate.' This prediction shortly was, that when 'Norman, the third Norman,' should meet an accidental death; when the rocks on the coast of Macleod's country called the 'Maidens' became the property of a Campbell; when a fox had young ones in the castle; and when the 'Fairy Banner' should be for the last time shewn—the glory of Macleod should depart for a time; the estates be sold to others. But that again in the far future another Macleod should redeem the property and raise the family higher than ever. Now comes the curious coincidence told by Mr Macleod.

An English smith at Dunvegan told him one day that next morning he was going to the castle to force open the iron chest in which the 'fairy flag' of the Macleods had lain for ages undisturbed. Mr Macleod was very anxious to be present, and at last he got permission from 'the factor,' upon condition that he told no one of the name of Macleod—the chief included—what was to be done. The smith tore off the lid of the box, and the famous old flag was exposed—'a square piece of very rich silk, with crosses wrought with gold-thread, and several elf-spots stitched with great care on different parts of it.' Very soon after this, Mr Macleod goes on to say, 'the melancholy news of the death of the young and promising heir of Macleod reached the castle. "Norman, the third Norman" was a lieutenant of H.M.S. the *Queen Charlotte*, which was blown up at sea, and he and the rest perished. At the same time, the rocks called "Macleod's Maidens" were sold in the course of that very week to Angus Campbell of Ensay; and they are still in possession of his grandson. A fox in possession of a Lieutenant Maclean residing in the west turret of the castle, had young ones, which I handled. And thus all that was said in the prophecy alluded to was so far fulfilled; although I am glad the family of my chief still enjoy their ancestral possessions, and the worst part of the prophecy accordingly remains unverified. I merely state the facts of the case as they occurred, without expressing any opinion whatever as to the nature of these traditional legends with which they were connected.'

A coincidence as remarkable as any of these is the one Mr Wilkie Collins notices in connection with his novel *Arncliffe*. Readers of that powerful story will recollect what an important part the fatal effects of sleeping in poisoned and foul air play in it. They, writes Mr Wilkie Collins, 'may be interested in hearing of a coincidence relating to the present story which actually happened, and which in the matter of "extravagant improbability" sets anything of the same kind that a novelist could imagine at flat defiance. In November 1865—that is to say, when thirteen monthly parts of *Arncliffe* had been published, and I may add, when more than a year and a half had elapsed since the end of the story, as it

now appears, was first sketched in my note-book—a vessel lay in the Huskisson Dock at Liverpool, which was looked after by one man, who slept on board, in the capacity of ship-keeper. On a certain day in the week this man was found dead in the deck-house. On the next day a second man, who had taken his place, was carried dying to the Northern Hospital. On the third day a third ship-keeper was appointed, and was found dead in the deck-house, which had already proved fatal to the other two. *The name of that ship was the Armadale.* And the proceedings at the inquest proved that the three men had all been suffocated *by sleeping in poisoned air.* The case, Mr Collins goes on to say, 'was noticed—to give two instances in which I can cite the dates—in the *Times* of November 30, 1865, and was more fully described in the *Daily News* of November 28, in the same year.'

MUSHROOM CULTIVATION IN JAPAN.

IN pursuance of a plan commenced a short time back of furnishing information respecting the staple products of Japan, their culture or preparation, Her Majesty's Consul at Yokohama, in his published Report to the Foreign Office, deals, among other matters, with the cultivation, &c. of mushrooms; and as that subject is a novel one in this country, some brief account of the process may not be unacceptable to our readers. The best of the edible species of mushrooms are known to the Japanese as *matsu-také* and *shii-také*. The difficulties experienced in preserving the former kind prevent their being available for export, added to which, even when successfully dried, they are nearly tasteless; the *shii-také*, on the other hand, have this peculiar excellence, that though they are all but tasteless in their raw state, they have an extremely fine flavour when they are dried. The quantity that grows naturally on the decayed roots or cut stumps of the *shii* tree is not sufficient to meet the demand, and consequently much skill has been brought to bear on their cultivation, notably by cutting off the trunks of the *shii* and other trees, and forcing the growth of the mushrooms on them. Different varieties of oak are most in favour with the Japanese for the cultivation of mushrooms, the one just mentioned being considered to give the best results. The tree grows abundantly in warm places with a south-easterly aspect, and attains a height of about eighteen or nineteen feet. It is an evergreen, bearing small acorns, which are steamed and eaten; the wood is used for making boats' oars, charcoal, &c. Another oak, the *kashura*, from which mushrooms are obtained, is also plentiful in warm localities, and grows to a height of thirty or forty feet; its leaves are used in cookery, and the wood is in great demand for divining-sticks. A third description of oak, the *donguri*, is found all over the country; and its acorns, after being pounded and steeped in water, are made into dumplings.

Mushrooms, we are told, are obtained from any of the above-mentioned trees in the following manner: about the beginning of autumn a trunk five or six inches in diameter is selected and cut up into lengths of four or five feet; each log is then split into four pieces; and on the outer bark slight incisions are made at once with a hatchet, or else the logs are left till the following spring,

when deep cuts are made in them. Assuming the former course to have been pursued, the logs, after having received several slight incisions, are placed in a wood where they can get the full benefit of the air and heat; and in about three years they will have become tolerably rotten in parts. After the more rotten parts have been removed, they are placed in a slanting position; and about the middle of the ensuing spring the mushrooms will come forth in abundance. After these have been gathered, the logs are still kept, and submitted to the following process. Every morning they are steeped in water, and in the afternoon they are taken out and beaten with a mallet; they are then ranged on end in the same slanting position as before; and in two or three days' time mushrooms will again make their appearance. In some places it is the custom to beat the logs so heavily that the wood swells, and this seems to induce the growth of mushrooms of more than ordinarily large size. If, however, the logs are beaten gently, a great number of small mushrooms grow up in succession. Another mode of forcing the growth of mushrooms is to bury the cut logs at once in the earth, and after the lapse of a year, to take them out and treat them in the manner just described.

The mushrooms thus grown are stored in a barn on shelves ranged along three sides, with braziers lighted underneath. Afterwards they are put into small boxes, the bottoms of which are lined with either straw or bamboo-mats; these are placed on the shelves, and gradually dried with great care. Another mode of drying mushrooms is to string them on thin slips of bamboo, which are piled together near the brazier, the heat being kept in by inverting a closely woven basket over them.

Of other edible mushrooms in Japan besides the *shii-také*, Mr Robertson particulars the following: The *kikurage*, which grows in spring, summer, and autumn, on the mulberry, the willow, and other trees; it is a small, thin, and soft mushroom, very much marked at the edge, and of a brownish tinge. The *tsu-také*, which grows on rocks in thick masses. The *so-také*, a very delicately flavoured mushroom, which is found on precipitous crags, and is consequently scarce, owing to the difficulties attendant upon its collection. The *kava-také*, a funnel-shaped mushroom with a long hollow stalk, which is found in shady spots on moorland.

By adopting a somewhat similar plan of forcing mushrooms in Great Britain, it is quite possible that growers might find it to their advantage.

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AIR AND WATER POLLUTION.

We have been lately staying at a pleasant sea-side resort. The stretch of sands on the beach is beautiful, the houses generally well built and commodious, the accommodation for strangers excellent. With much to commend, one thing struck us as very anomalous. There are several factories, including one or two bottle-works, and from these are almost constantly sent forth huge volumes of dense black smoke, which according to the direction of the wind, pour across the otherwise fair scene, and tend greatly to pollute the atmosphere. Now, this we presume to think is a serious encroachment on public rights. Nature beneficently provides a pure atmosphere, which all may enjoy, and that will be favourable to vegetable growth. Despising this primary principle, and acting only from sheer selfishness, certain individuals, ordinarily known as capitalists, set up factories with tall brick chimneys, from which are vomited those hideously dark masses of coal-smoke, in defiance of good taste, decency, and common-sense. We had almost said in defiance of honesty, because the air of heaven is a universal inheritance, and the pollution of it for selfish ends is, morally speaking, little better than picking a pocket. Yet, how much of this aggressive dishonesty is habitually practised! The air of towns and villages is polluted. Some of the most beautiful rural scenes are polluted. Over charming dells, clothed in natural shrubbery and flowers, to which one would like to flee and be at rest, is seen hovering a pall of black smoke, projected from some sort of factory or a paper-mill, and doing its best to transform beauty into ugliness. Surely, to speak mildly, that is a public wrong.

Travelling through England, and entering what are termed the manufacturing districts, we come upon the Smoke Demon in full blast. Who, for example, can forget the revolting aspect presented by Sheffield or Wigan? The sky hidden by dark smoke, the houses begrimed, and the land blighted, as if saturated with coal-cuhm. Obviously, there is a prevailing sootiness; and speculating as to how

people can possibly live amidst such horrors, we think with a feeling of relief of the joy they possibly experience when on Sunday the chimneys cease to smoke, the blue firmament is suffered to be unveiled, and children are able to fill their lungs with air comparatively free from impurity. Even in the neighbourhood of towns not absolutely of the manufacturing class, the tourist is pained to observe what atmospheric deteriorations are caused by smoke. In few places nowadays are there not tokens of industry involving the application of steam-power. Tall chimneys are apt to start up where least expected, with the usual results. These brick chimneys are not usually an embellishment to the landscape; but we raise no objection to them on this ground. Required for purposes of manufacture, and valuable in connection with the employment of large numbers of persons, they may be viewed as indispensable adjuncts in promoting commercial prosperity, and increasing the national wealth. Accordingly, it is not the chimney-stalks we find fault with; it is the vast masses of smoke that needlessly issues from them, which at a very small expense and a slight degree of care, could be effectually prevented. For want of this reasonable amount of care, the green fields in the vicinity of the chimneys cease to be green. The soot falling on the pasturage, defiles the herbage; and the poor sheep and lambs, born to experience the vicissitudes of weather, but at least to wear clean wool upon their backs, are as dingy as professional chimney-sweeps. Unmistakably, they have been besmirched by the Smoke Demon, who in his iniquitous visitations respects neither man nor beast, and is apparently indifferent to what becomes of the whole animal and vegetable creation. Perish the comfort of everybody; let smoke in any measure of density have its sway! That is the doctrine of greed predominant in this wonderfully advanced nineteenth century, which some people are never done enlorgising.

We see a curious instance of the Smoke Demon's proceedings in a reputedly fashionable part of a large city. A piece of land had just been laid out

in the building of mansions of a superior class—not one of them valued at less than seven or eight thousand pounds—when lo and behold the purchasers of the newly erected edifices find to their consternation that the tall chimney of an unexpected factory has begun to belch volumes of black smoke into their back-windows all day long! The chimney—that of a perfectly respectable flour-mill, we believe—is unexceptionable as regards chimney architecture. It is tall and handsomely tapered; but what signifies these commendable qualities? There, from morning to night, goes its smoke, polluting the atmosphere in the bedrooms, killing the flowers in the conservatories, odious and sickening in all directions. Very hard this on the purchasers of these splendid mansions. They have got unexceptionably good houses, but with what an atmospheric drawback!

Why, however, should municipal authorities tolerate such abominations? Yes, why should they? There exist in many places police edicts designed to quench the Smoke Demon. Through the vigilance of the authorities, the smoke nuisance in London has been immensely modified within our recollection. In some large provincial towns it has likewise been materially abated. But taking the country at large, it is about as bad as ever. The evil has little chance of being thoroughly mastered by any local magistracy. The very authorities who should stamp out the abomination are likely enough to be the evil-doers themselves, or are at least so compromised by surrounding influences as purposely in this particular to neglect the interests of the community. Besides, to put existing and not very distinct laws in motion, a heavy expense is liable to be incurred. And local authorities of all kinds do not like to encounter litigation unless strongly urged by public clamour and backed by persons of note, who do not mind to take trouble and share part of the cost. We apprehend that no effectual remedy is obtainable in present circumstances.

The true corrective would be to assign the conservancy of the atmosphere and of rivers to officers directly appointed by and responsible to the crown. To this opinion has come Dr Richardson, one of the most eminent promulgators of the laws of health. In a recent lecture on the subject at the Royal Institution, he says very pointedly: 'In the future of sanitary science, the politician must come forward more resolutely than he has done, in order to secure for those he governs three requisites—pure water, pure food, and pure air. It is utterly hopeless to trust to companies in a matter of such vital importance as the supply of water. It is equally hopeless to trust to the undirected action of local authorities.' Proceeding to state that a remedy can be found only in the official action of a supreme authority, he says: 'As to pure air, there is no practical legislation of any kind. The air of our large towns is charged with smoke and impurity. The air of our great factories is charged with dusts which destroy life

with the precision of a deadly aim. Dr Purdon, one of the certifying surgeons under the Factory Acts, reports that in flax-working factories under his care, the carders, who are all females, if they get a carding-machine at sixteen years, generally die at thirty years. Could anything be more terrible than such a fact, that a girl of sixteen should have to live by an occupation that will bring her existence to an end in fourteen years, and to that end with all the prolonged wasting, sleeplessness, suffering, incident to the disease consumption of the lungs? If it were the fate of these doomed workers that at the close of fourteen years' work the majority of them were taken forth and shot dead in an instant, their fate were infinitely better than it is. The heart of the nation would thus be aroused, and the law in all its majesty would be put in operation to arrest the progress of the crime and to punish the offenders. Yet, year after year as terrible an offence goes on, and because the result of it is hidden in the sick-room, there is no arrest of its progress, no punishment for its commission.'

In the same lecture, Dr Richardson speaks with equal vehemence on the too prevalent practice of polluting rivers and wells by the influx of sewage from large towns and various kinds of public works, dye-works in particular. Here, again, the action of local authorities is generally hopeless. Magistrates and town councils will complacently see a river flowing past them loaded with impurities. 'The government,' he says, 'must either produce a process or processes for pure water supply, and insist on every local authority carrying out the proper method; or it must—and this would be far better—take the whole matter into its own hands, so that under its supreme direction every living centre should, without fail, receive the first necessity of healthy life in the condition fitted for the necessities of all who live. By recent legislation we had some security for obtaining fresh animal food, and foods freed of foreign substances or adulterations. The penalties that might be inflicted on those who sell decomposing, diseased, or adulterated foods were beginning to have effect, and much good was resulting.' Similar regulations ought to be applied to water. The fouling of rivers by sewage must be rendered penal. What horrid ideas arise on the consideration that a large part of the population of London are daily using the water of the Thames, into which has been poured the sewage of Oxford and a number of other places! The Clyde below Glasgow offers an example of still greater pollution; but its very badness saves it from use for domestic purposes; and in point of fact this fine river, for the improved navigation of which so much has been done, can now scarcely be spoken of as anything else than a gigantic common sewer, on which ships of large burden are borne to and from the sea. The Irwell at Manchester offers a specimen of an impure river of a different type. Here much of the pollution seems to arise from the liquid refuse of dye and other works. The last time we saw the Irwell, it

had all the appearance of a sluggish river of black ink. Its colour, however, is liable to change with the predominating dye-stuffs which it happens to receive. The droll remark is made, that boys who indiscreetly take a fancy for bathing in it are apt to come out blue. Its condition and qualities were some time ago commemorated in a few comic verses in a newspaper, of which a cutting was sent to us. We give them as being too clever to be lost sight of.

SONG OF THE IRWELL.

'I flow by tainted, noisome spots,
A dark and deadly river;
Foul gases my forget-me-nots,
Which haunt the air for ever.
I grow, I glide, I slip, I slide,
I mock your poor endeavour;
For men may write, and men may talk,
But I reek on for ever.

I reek with all my might and main,
Of plague and death the brewer;
With here and there a nasty drain,
And here and there a sewer.
By fetid bank, impure and rank,
I swirl, a loathsome river;
For men may write, and men may talk,
But I'll reek on for ever.

I grew, I glode, I slipped, I slode,
My pride I left behind me;
I left it in my pure abode—
Now take me as you find me.
For black as ink, from many a sink,
I roll a poisonous river;
And men may write, and men may talk,
But I'll reek on for ever.

And thus my vengeance, still I seek
Foul drain, and not a river;
My breath is strong, though I am weak,
Death floats on me for ever.
You still may fight, or may unite
To use your joint endeavour;
But I'll be "boss," in spite of Cross,
And poison you for ever.

We trust that the concluding threat of remaining for ever a poisonous and fetid river is not true of the Irwell any more than the Thames or the Clyde. The subject of river-pollution, as of air-pollution, is too serious to be much longer neglected, and we trust that government, setting aside private, selfish, and factious interests, will soon deal with it in as peremptory a fashion as constitutional forms will admit. As concerns the pollution of the air by smoke from factories, there is not a vestige of excuse. We have shewn again and again with, we fear, tiresome reiteration, that the consumption of smoke is a very simple mechanical process, and has the advantage not only of keeping the air unpolluted, but is attended with such a considerable saving of fuel, as to render the first cost of the appliances of no consequence. If such be the case, and we can prove it by many years' experience, the proprietors of public works at the seaside resort already mentioned, and hundreds of

other factory owners, are clearly chargeable with a shameful degree of disregard to the rights and feelings of their fellow-creatures.

W. G.

THE LAST OF THE HADDONS.

CHAPTER XXXVII.—REST AND PEACE.

TIME has run on since then, and my life has grown fuller and happier. It was a great disappointment to Philip and Lillian to find what my boasted good fortune really was; and nothing would reconcile them to the idea of my remaining at the Home, although they were not able to deny that the work there was congenial to me.

Marian Trafford never forgave me my one day's grandeur, and never again addressed me as an equal when we chanced to meet. She and her husband did not lead the happiest of wedded lives. On the evening of Lillian's wedding-day, Arthur Trafford was found lying on the floor of his dressing-room with an exploded pistol by his side. If he really meant to destroy himself, he had attempted it in the half-hearted way with which he did everything, having only grazed his temples and swooned with fright, and so offended his wife to no purpose. Poor Marian, her married life was neither a long one nor a happy one! No child's voice was heard at Fairview; and the miserable bickerings between the husband and wife were common gossip. She was not the kind of woman to try to conceal her disappointment; and he was not the kind of man to spare her the knowledge that she had never possessed his love. Could he have foreseen, he would doubtless have adopted a different policy, and at anyrate kept up some semblance of affection.

A neglected cold and improper clothing for the season brought on an attack of inflammation of the lungs, to which Marian succumbed; and after her death it was found that she had avenged herself. A lawyer was hastily summoned to her bedside, and her will made as soon as her illness was pronounced dangerous. After the funeral it was found that the endeavours of Arthur and his sister to make up for the past by extra attention at the last had been in vain. It was said that she talked to them about the large fortune which they would inherit up to almost the last hour; and their disappointment was bitter in proportion.

All Marian Trafford's wealth was left to Lillian's children. Not to Lillian, as she in a characteristic letter informed her—! In case your husband should die, and Arthur should get the property after all, for he would be sure to marry you directly. Many and many a time has he tanned me about his love for you; and as good as said I wasn't to be compared! But if he married me for the sake of my money, he won't have much to boast of now. His sister too, Caroline, will be in a fine state; but she's only got herself to thank for what I have done. I *did* mean to leave something handsome to Caroline, till I overheard her talking to her brother about me begging him to have patience a little while longer, because the doctors said that I could not last out many days unless a turn came; and saying ever such things about what she had had to put up with! What she had to put up with, indeed! When she has had such a home at Fairview, and lived upon the best of everything, without its costing her a penny!

And as to presents; no one could be more generous than I have been to Caroline; and she knows it, if she would only speak the truth. If I do not get over it, I am determined that *they* shan't be any the better off! I'd sooner leave everything to Miss Haddon, though I should be loath to do that too. Fortunately, there is you, dear; you are my sister after all, and your Ma was not treated well; I have always said that. Besides, I can't forget how kind you were to me, when you thought that it was *my* Ma who went wrong instead of yours. You never shewed off a bit; and it's only right you should be rewarded. I haven't put Aunt Pratt into my will, because one naturally does not care about its being known that any of one's relations are common people; but I should like you to give something handsome to her, and say it came from me; and so forth, and so forth; a letter we were all only glad to put out of sight and out of mind as soon as possible.

The Pratts were well taken care of, and not a little astonished at Marian's liberality, as it was interpreted to them by Lillian. Arthur Trafford made a great deal of protestation in the outset about his repugnance to receiving the annuity which Philip offered; but of course he *did* receive it, and in time came to think that it was much less than he ought to have, always forestalling it. But Philip remained firm, and never increased the amount to more than was at first offered, a sum which he considered sufficient for an idle man to live upon.

How shall I write of the married life of Philip and Lillian? I will only say with the poet:

Love took up the glass of Time, and turned it in his glowing hands;
Every moment lightly shaken ran itself in golden sands.

They were not selfish in their happiness, finding plenty of room in their hearts for those outside their own circle; which by the way was now a not very small one. Need I say they held fast to 'Sister Mary,' and though they could not be brought to allow that she had chosen the life she was best fitted for, they did their best to impart to it as much sunshine as they could; and I hope comforted themselves with the belief that my happiness was owing more to their efforts than my work. Was there a word of truth spoken in the jest, sometimes thrown playfully at me, to the effect that I was imbuing my god-child Mary with the notion that she had a mission, as her brothers term it? She was a thoughtful earnest child of fifteen, who had spent a great deal of her time with me, and sometimes said she would choose Aunt Mary's life before all others. It did her no harm to think so for the time being; but I knew that Aunt Mary would choose her mission to be a happy wife and mother. Failing that, I could only hope she would be as happy as Aunt Mary. For notwithstanding an occasional bit of sentiment, I was as happy a woman as could be found in the three kingdoms, with a larger circle of friends than I could well count. And very proud I was of their friendship, though the majority of them could not be said to belong to the upper strata of society. I had a large correspondence too—letters which brought tears of joy and thankfulness to my eyes, though they could not be quoted

as elegant specimens of the art of letter-writing; to say nothing of their being addressed in a somewhat eccentric manner, occasionally sealed with a thimble, and so forth.

I imagined that the story of my life would run thus smoothly and evenly on to the end; but the aspect of things changed. First, we lost dear old Mrs Tipper, who passed peacefully away, lovingly tended in her last moments by her children, as she called us. She left everything she possessed to me. Shortly afterwards, Jane Osborne died, bequeathing the bulk of her property for the future maintenance of the Home, and what she termed a competence to me. Five hundred a year appeared to me something more than a competence; and with my dear old friend's legacy it made me a rich woman.

Philip and Lillian would now give me no peace, insisting that I had not the shadow of an excuse for remaining at the Home. Moreover, Hill Side was waiting for me. They had been long engaged in altering and improving Fairview, and had at length taken up their abode there. It was now a large estate, sufficient ground adjoining having been purchased to make a good park; and the trees, planted fifteen years before, were beginning to look respectable. The house itself has been a great deal altered and *subdued*, as Philip calls it, a story being taken away, and wings thrown out, &c.; very greatly to its improvement. It now looks a fitting home for a family of good standing, and as Philip's brother allows, a residence worthy of one who owns the name of Dallas.

In truth they had outgrown Hill Side; two spirited boys and three girls with the necessary arrangements for an education befitting their accumulating wealth, were not contemplated in the first plans; and I could not pretend to think that the change had been made solely on my account; although they threatened to let the place fall to ruin, if I would not go to it. Everything was left just as it was; Lillian took nothing but her mother's portrait, and Philip a portion only of his books; and to this also there was no demurring; Fairview being furnished befitting its size. Whilst I was still hesitating, or fancied that I was hesitating (for I found it very pleasant to dwell upon the idea of ending my days at Hill Side), Robert Wentworth put in an irresistible argument in favour of my yielding to their wishes, and quitting the Home. He pointed out that I was preventing some poor gentlewoman from earning the income pertaining to the situation. I was not a little surprised at his going over to their side; but I could not, had I wished to do so, deny the reasonableness of his argument. As soon, therefore, as a lady was found to undertake the office, I resigned it.

My home-coming was made a *fête-day* in the village. Had a royal visitor been expected, more could not have been done in the way of preparation. The place was gay with flags and evergreens, whilst feasting and bell-ringing were going on all day. And the approach to my future home was arched over with flowers, and 'WELCOME' repeated wherever the word could be put, but expressed more delightfully than all in the faces of Philip, Lillian, and their children. It was a busy day too, as 'befitted the coming home of Aunt Mary,' laughingly said the children. A dinner was given to the grown-up people in a large tent on

the green; and later on a tea, to which children were invited, with a day's holiday to all and sports between times. Of course Becky and her husband were honoured guests with their eight children. He is now a flourishing market-gardener, very proud of his little woman, though her happy married life does not tend to decrease the size of her mouth, since there is always a smile upon her face.

We had all been very busy, and were glad to take our tea on the terrace in the cool of the evening—just sufficiently distant from the sound of merriment in the village below. After tea, Philip and Lillian, lovers still, stroll down to the green to watch the sports awhile, the tired children electing to remain with Aunt Mary and Uncle Robert. My eyes followed the two as they passed down the path under the flowery arches, husband and wife in all the best sense of the words. Philip was a stately, thoughtful, English gentleman, growing anxious and ambitious for his two boys; a little too ambitious, I told him, in certain directions, since they are but mortal. And his happy wife, beautiful with all the soul's expansion, was worthy to be the mother of girls—confiding to me her ambition to fit them to influence the lives of honourable men.

My nieces, as they were called, were to live with me in turn. Lillian says they are very pitiful to such of their friends as have no Aunt Mary. Little Phil was very enthusiastically describing to me the advantages of my new home.

'Look here, Aunt Mary; it's the best place for larks you can imagine; beats Fairview hollow.'

'Larks, Phil?'

'Well, you know. Suppose you've got some one in the library you want to make jump, nearly out of his skin; just creep round the plantations, and crawl under the bushes, and climb up over the stones—you must take care though, for they are awfully slippery—and peep in at the windows with your face made up like a brigand, and point a sham pistol at him!'

I expressed a doubt as to my capacity for crawling under bushes and climbing over slippery stones; at which Phil proposed other larks, which he considered to be more within the compass of my ability. But with the dignity of thirteen, and the experience of three months at Eton, Robert gave it as his opinion that Phil's larks were not worthy of the name.

'Look here: I know a fellow,' &c. &c.; sinking his voice into a whisper as the two boys drew closer together; their sister Jenny, who is said to be developing a taste for larks, and is very proud of being occasionally taken into their confidence, listening with bated breath and dilating eyes. Then Mary whispers to me that if I want to enjoy that bit out of *Midsommer Night's Dream*, and fancy myself in the woods really, I must sit under the tree on the slope when the moon is rising and the shadows are deep. And before she is carried off by her nurse, Baby Lily solemnly presents me with a woolen lamb, which she thinks enough to insure my future happiness and make me 'dood.'

'And so you have got your rest and peace at last?' said Robert Wentworth, as he and I stood for a few moments together on the terrace watching the sunset.

'Yes,' I replied, a little absently, my thoughts reverting to the old dreams of peace and rest.

'Well, it's all *couleur de rose* now. But how long will this kind of thing satisfy you?'

'What kind of thing?'

'Being worshipped and fêted in this way.'

'I find it very pleasant,' I demurely replied.

'You will not for long, Mary.'

'Do you think I am not capable of appreciating rest and peace then?'

He smiled. 'I give you six months.'

'And yet you were as urgent as the rest about my giving up work,' I said.

'Yes; I wanted to see you in an independent position, and so to ascertain if certain theories of mine are correct.'

'Uncle Robert, is it true? Phil says he heard mamma tell papa that she did not despair of your marrying Aunt Mary even now. Is it true—really?'

I saw a swift flush pass over his face, and an expression in his eyes which I had only once seen there before, as they turned for a moment upon me. Then after a few moments he said, in a low husky voice: 'Ask auntie!'

Robert Wentworth had never married, and I cannot affect to be ignorant of the cause; but in all the long years that have passed he has spoken no word of love to me. Now the child's words had stirred the depths of his nature, and shewn me that time has worked no change in him.

'Is it true, auntie—is it?' asked Jenny, turning impetuously towards me.

'Uncle Robert and I love each other like old friends, dearie,' I said, replying to him in a low faltering voice. 'But—I am too old to think of—marrying;' laying my hand gently upon his, resting upon the back of a garden-seat, as I spoke.

'Well, that's what Robert and I said,' frankly ejaculated Jenny. 'You are old, and old people don't marry;' and off she ran to tell the others.

He recovered first, beginning to talk to me about a case he had in hand, and very soon contriving to get me sufficiently interested in it to enter warmly into the pros and cons with him. He was no longer a briefless barrister, having made a name in the profession, and being remunerated accordingly. I have the comfort of knowing that his life, like my own, is on the whole a full and happy one, although we have both had to bid adieu to certain things.

Before the six months he had given me expired, I began to find that I required change of air, and commenced absenting myself occasionally from my beautiful luxuriant home for two or three weeks at a time and sometimes even longer, much to the surprise of Philip and Lillian, who could not understand why I should choose to go alone and be so mysterious about the places I visited. But they became less anxious if not less curious when they found that I always returned cheered and refreshed by the change, and at length ceased to question me.

Robert Wentworth appeared to take it for granted that my trips were in search of the picturesque; occasionally remarking that I must be growing familiar with all the loveliest nooks in England. I flattered myself that I had for once succeeded in keeping him in the dark, and he did not suspect the real object of my journeys. But I was mistaken. I might as well have taken him into my confidence at once, and he shewed me that I might, in his own fashion.

During one of my absences from Hill Side, I was under the unpleasant necessity of appearing

at a police court. In obedience to a call for Mary Jones, I stepped into the witness-box, as unwilling a witness as had ever made her appearance there. I had just been trying to comfort myself with the reflection that Robert did not take up such cases, and was not at all likely to be there, when our eyes met; and from the amused expression in his, I knew that he was about to examine me, and something of what I might expect. As he afterwards informed me, he had taken up the case for the express purpose of shewing me that he knew all about my movements.

'Is Mary Jones your real name?'

'It is the name I am known by.'

'And you are a lodger in Biggs Court, Bethnal Green?'

'Yes; I have two rooms there.'

'And you out nursing sick people in the neighbourhood?'

'I have occasionally done so.'

'Is it a fact that you have musical evenings and readings to which you invite the poor women in the neighbourhood; and that you lend money to the deserving, and give lectures to them about the management of their homes and children?'

'I do not call them lectures, sir,' I replied demurely. 'But I see that you know all about my movements.'

'It is my business to know,' he replied gravely, going on with the case, a charge of assault, not uncommon in the neighbourhood of my town residence, to which I had been a witness, and was obliged to give evidence.

Since then we have not met very frequently. He is always an honoured guest at Fairview; but he is on the Bench now, devoted to the grand earnest life of the upright judge, and has very little time for private intercourse, although he is always ready to give us counsel and advice. It is my pride to hear of the respect and honour he wins, and to know that I have not been instrumental in impairing his usefulness in the world. Meantime, we are beginning to talk sometimes of the life beyond, with the yearning of those who have borne the heat and burden of the day, and I listen with bowed head and thankful heart to his acknowledgment that his life has not been lived in vain for himself any more than for others. This may be said only to cheer and comfort me; but I believe that it is truer than he himself thinks it to be. But I am above all pleased with his occasional grim little attacks upon my logic, &c., for that is to me the most convincing proof that we are the best of friends; and we are highly amused when the children take my part, and ask him not to be hard upon Aunt Mary.

THE END.

HYDERABAD AND ITS RULERS.

THE dominions of the Nizam, of which Hyderabad is the capital, are situated in the southern part of Central India, and are of considerable extent—nearly five hundred miles from north-east to south-west, and about three hundred and fifty in breadth. The Nizam holds a very high place among the native sovereigns of India; his revenue is a large one, and is yearly increasing, greatly owing to the wise administration of the present prime-minister, Sir Salar Jung, a man of singularly intelligent

and enlightened views, with a remarkable capacity for government. For upwards of twenty years this able and talented man has powerfully swayed the councils of the Nizams; and since the death of the last ruler, his young son and successor, still a minor, has been entirely under his guidance and control.

The young Nizam is now a boy of nine or ten years of age; and until he is fifteen he will not assume the reins of government. His health is unfortunately not good; his constitution being naturally a feeble one, and the enervating life led in the zenana has in no way tended to strengthen it. He is said to have an amiable disposition and not bad abilities; an English tutor has been provided for him, and he has every facility for receiving a first-class education. This, in conjunction with the wise counsels of his prime-minister, ought to make him a liberal and enlightened ruler when the time comes for him to take the authority into his own hands. Let us trust that it will be so.

Sir Salar Jung speaks English fluently; and on the not rare occasions when he gives an entertainment to the élite of the European society, his manners are those of a polished and high-bred gentleman, anxious that his guests should enjoy themselves, and that none should be overlooked. In his extensive and splendidly furnished palace are several rooms fitted up entirely in the English style, with chairs and sofas of every form and dimension, and tables covered with albums, photographs, and all the innumerable ornaments and knick-knacks of fashionable London drawing-rooms. Here the guests all assemble before dinner; and when the announcement is made, Sir Salar offers his arm to the principal lady present, generally the wife of the English Resident, and conducts her to the dining-room, his own private band playing *The Roast Beef of Old England*, while the company defile into their places. Here, again, all is in the English style, or rather in that which is known as *à la Russe*; a long table brilliantly lighted, and decorated with flowers, fruit, and confectionery, all arranged in the most tasteful manner, the band continuing to play at intervals. The dinner is in precisely the same European fashion—one course following the other; and the viands and wine all of the most *recherché* description; champagne in abundance, liqueurs, everything in short that can gratify the most fastidious palate; Sir Salar himself being a man of the simplest tastes and drinking nothing but cold water.

Dinner ended, all rise, the gentlemen not remaining behind the ladies. Sir Salar again conducts the *burra behar*, or principal lady, to a terrace on the roof of the palace, where there are seats arranged for the guests, tea and coffee handed round, a quiet cigar permitted in the background, and where a fine exhibition of fireworks is witnessed. This is the conclusion of a very agreeable entertainment, to which about a couple of hundred people are usually invited, who are all received with the most perfect courtesy by Sir Salar, his young sons, and the members of his suite; and who quit his hospitable roof much

impressed by the large-mindedness and frank geniality that so greatly distinguish the Nizam's popular prime-minister.

Sometimes while the company is arriving, a 'nautch' is held in a kind of garden quadrangle, and the guests stroll out and look on for a few minutes, just as they feel inclined. Ordinary nautch-dancing is anything but the incorrect proceeding it is commonly supposed to be; it is really rather a dreary entertainment, and a very few minutes of it will be sufficient to satisfy the curiosity of most people. Be this as it may, nautch-dancing is a very favourite amusement among the high-class natives. When Sir Salar Jung gives a banquet to his fellow-countrymen, there is a nautch on a very large scale; the viands also differ considerably from those presented to his European guests, and consist chiefly of curries of every possible kind and flavour, sometimes more than fifty being served at a meal.

Though he has held the supreme power for many years, and has been prominently before the public for a yet longer time, the prime-minister of the Nizam is not much above forty years of age. He is of medium height, with an air of great dignity, an intelligent expression, and piercing dark eyes. His face is entirely shaven except a dark moustache; he generally wears a tight-fitting dark robe and small white turban, with the Star of India on his breast, and well-fitting English boots. His two wives and his daughters are never seen out of the zenana, but they receive visits from English ladies; and it is generally understood that Sir Salar is more liberal in his ideas regarding the treatment of women than is usual among Mussulmans; and his daughters are well educated, and have had foreign instructresses.

Among the institutions of Hyderabad evidencing an enlightened spirit both among the foreign residents and the natives, is the successful establishment of an American female doctor, a lady distinguished alike by professional skill and charm of manner, and who commands an excellent practice among the female portion of the community. She is also frequently summoned to attend at the zenanas, a very great boon to the poor secluded inmates, whose maladies are very frequently wrongly treated, owing to the imperative strictness of the rule which prohibits the physician from ever seeing his patient; the most that is allowed in the case of a male practitioner being the extension of the hand or tongue through a slit in a curtain, the face all the time remaining perfectly invisible.

Hyderabad, with which is closely connected the large Anglo-Indian station of Secunderabad, is in many respects a very pleasant residence. The society is good, for in addition to a considerable sprinkling of civilians, occupied in various ways, Secunderabad is an important military centre, and the district enjoys many advantages in a social and sanitary point of view. Only about twenty-four hours' journey from Bombay by rail, it is thus brought into easy communication with one of the great mercantile and social centres of India. Its real distance from Madras is not much more; but as there is no direct line, a detour has to be made in order to join the main line from Bombay at Sholapur, which nearly doubles the time consumed in travelling between the two places. This, however, may probably be amended by-and-by;

when Madras will be about equidistant with Bombay, and Hyderabad will then rise into even greater importance. The climate is, generally speaking, excellent: its situation, nearly two thousand feet above the level of the sea, conducing much to its salubrity; while it is fortunate in having two monsoons or rainy seasons, one between June and September, and a shorter one later in the year. These rains are not of the ordinary violent character, but more resemble April showers; the entire depth of fall not usually averaging beyond twenty inches, while it is more genially and beneficially diffused, rendering the air delightfully cool and pleasant.

The cost of living is perhaps rather under the recognised rate of most Anglo-Indian stations. Certain things are to be had very reasonably indeed, while others are high-priced, especially the generality of European articles, which are charged nearly double what they would fetch at home. Strangely enough, tea is very dear; nothing drinkable can be got under about six shillings a pound; lower-priced kinds being perfect trash. But eggs, poultry, and even very tolerable mutton can be bought very cheaply; a rupee (about two shillings of our money) will purchase three or four fowls, certainly rather skinny ones; while three rupees is an ordinary price for one of the small country sheep, and the mutton is not bad, though of course it is not 'gram-fed,' as they call the kind specially fattened for the table, and which costs three or four times the money. There is much sociability among the English residents; and the cooler nature of the climate enables them to have a greater variety of al-fresco entertainments than is customary in the tropical temperature of most parts of India. Perhaps partly in consequence of this, combined with its higher and more salubrious situation, the district round Hyderabad is generally very healthy; and people have lived there for many years and enjoyed excellent health without ever coming home at all. One well-known old Scotch gentleman has resided chiefly there for fifty years without ever returning to his native country; and to judge from his active habits and hale appearance, he will live there for many years to come.

Among the native population, however, the repulsive disease of leprosy is very prevalent; but Europeans seldom or never suffer from it. This dreadful malady is of two kinds: in one the type is exceedingly malignant; the afflicted persons are not permitted to go abroad, but are secluded in buildings specially set aside for their reception, and to all intents and purposes they are dead to their fellow-men.

The supply of water in the locality is excellent, mainly owing to the enormous reservoirs that have been constructed in the vicinity of Hyderabad, used principally for bathing both by the natives and by Europeans. The largest of these is about twenty miles round; and they are reached by numerous flights of steps, which are generally thronged by the natives at all hours of the day, for the double purposes of ablution and washing their clothes.

Cotton is the staple production of the country; but its other products and resources are being rapidly developed by Sir Salar Jung, who has organised large public works of various kinds, and is opening new roads through the less frequented portions of the Nizam's territory. If he could be

induced to impose more taxes, a very great, and also a justifiable increase of the revenue could be easily effected; but to this measure he has an invincible objection, alleging that it is a system to which the subjects of the Nizam have been little accustomed, and which would be unpalatable to all classes alike. This may be true; but so enlightened a ruler will probably ere long be brought to acknowledge the necessity for a moderate adoption of this system, both in the interests of his master and in those of the real prosperity of the noble dominions he has so long and so faithfully governed.

'PRENTICE-LIFE AT SEA.

THE sea is one of the most beautiful objects in nature, whether we watch it breaking in playful ripples on the pebbly beach, or shrink from it aghast when it rushes along the shore in the full thunder of its wrath, seething, tortured, convulsed, struggling in the clutch of the storm-fiend. To us in England who owe it so much, to us who have for centuries reaped our harvests on its pathless plains, and made of its trackless billows a highway to fame and fortune, the sea has always been an object of intense, almost passionate interest. Hence there have never been wanting among us volunteers for the wild sea-life of freedom and adventure. The boy intended by fond parents for quite a different fate, dreams of the unknown sea as he creeps reluctant to and from school, devouring it may be the while some well-thumbed novel of Marryat's, instead of mastering the intricacies of a Latin verb; until at last, the passion growing with his growth, he leaves all else behind him and finds his way to the shore, and looks wonderingly at the great ships lying in the harbour. Blissful Edens these, which have fought many a battle with the mighty ocean, although they are lying now so quietly in dock, with their rigging stretching aloft like a network of twine, and piles of cable lazily laid up on deck like so many coiled snakes. Gradually he finds his way on board, and then discovers that the rose has thorns; that sea-life, in other words, is by no means an Elysium.

Such a career is sketched for us in an amusing book, *Two Years Aboard the Mast*, by F. W. H. Symondson. The author was an apprentice on board the *Sea Queen*, a sailing ship, bound for Sydney with a general cargo. The ship was a good one, registered *A1* at Lloyd's, and carried a crew of twelve able-bodied seamen, four ordinary seamen, and three apprentices besides himself. There were also three mates—the first, second, and third.

Naturally life at sea is made up very much of routine, and the routine on board the *Sea Queen* was after the following fashion. A sea-day commences at mid-day, when we must suppose the starboard watch, to which our apprentice belonged, to be below. At twelve o'clock (eight bells) he comes up along with his watch, to relieve the port watch, who then have dinner. The second mate, who has charge of the starboard watch, then sees that every one goes to his proper work. He gives an eye to the steering of the ship, and carefully notes any shifting of the wind. A fresh helmsman relieves the man at the wheel, and receives direc-

tions as to steering from him; and our apprentice being the youngest, looks after the time and strikes the bells. At half-past twelve he strikes one bell, at one o'clock two bells, and so on. At four o'clock, eight bells are struck, and the port watch is called; and as soon as the man at the wheel is relieved, the starboard watch goes below, and smoke or read or spin yarns until tea-time, which is at five o'clock. They then receive a pint of the pale inky coloured nectar which does duty for tea on board ship, and along with it salt pork or junk. This is cooked in different ways; chopped up with biscuit, water, and slush, by which is meant the grease from salt meat, it forms a sea-delicacy called *seouse*. Another *bonne bouche* is dandy-funk, which is compounded of powdered biscuit, molasses, water, and slush; while dogsbody, composed of pea-soup, powdered biscuit, and slush, is also considered to form a savoury and refreshing compound. At six o'clock the other watch come below, and have their tea. During the first dog-watch, from four to six, no regular work is done, but no larking is allowed; but the second watch, from six to eight, is given up to fun and frolic of the maddest and merriest description, such as chasing rats with belaying-pins, or trying to turn the cook out of his galley, while he defends himself with boiling water. At eight o'clock the wild scrimmage ceases as if by magic, the starboard watch turn into their berths, and nothing is heard but the measured tread of the look-out on the fore-castle head, and the soft murmur of the wind and sea, as the night-breeze fills the sails, and the *Sea Queen* glides onward to her destination through the rippling water.

At midnight the port watch is relieved, all hands muster on deck, and the mate in charge sings out: 'Relieve the look-out! Relieve the man at the wheel!' and then all is silent again until four o'clock, when the starboard watch goes below, and the port watch come up.

The cook is called at four; and from half-past five to six the men have their coffee, and then comes the order: 'Brooms and buckets aft, to wash the decks;' which shews that the work of the day has begun. While the decks are being scrubbed, the captain generally makes his appearance, and after inspecting the compass and the sails, sits down in his favourite arm-chair on the poop with a book. On Saturday afternoons each watch are allowed an hour to wash their clothes, and at half-past four or five the stores for the week are served out: these consist of articles such as sugar, vinegar, &c.

In the little world of the ship, the captain is an irresponsible autocrat; his word is law; to refuse to obey him is mutiny. The sole command of the navigation and working of the ship rests with him, and the weather-side of the poop is his private property when he chooses to come on deck. In the ordinary daily work he seldom interferes personally, but transmits all his orders through the chief mate, who is a very important officer, and who superintends everything. When the cargo is stowed, he must give an acknowledgment for it and for all goods in the hold, and must make up any deficiencies. He must also keep the log-book, which is a very important trust. The officer of each watch marks upon the log-slate the courses, the distance run, the winds, and any subject of interest; and these at the end of every twenty-four hours are copied into the official log-book by the chief mate. The duties of the second

and third mate are less onerous; but they must always be addressed by the prefix of 'Mr' and answered with 'Sir'. The third mate has to dispense the stores—a very unpopular office, and one which does not fall to call down a shower of anything but blessings upon his devoted head. A boatswain is in general only carried by large ships, and his sole duty is to look after the rigging and all that concerns it. The carpenter is both an important and independent personage on board ship; the captain alone gives him his orders, and he has nothing to do with any of the three mates; his usual sobriquet is 'Chips.' The steward is in point of fact the captain's servant, and although he is well paid, he is generally looked down upon by the crew, who call him 'Flunkey.'

Pursuing the narrative presented to us by the *Sea Queen's* apprentice, we find that the cook, if he is a good one, is a very important personage on board ship; he answers generally to the name of 'Slushy' or 'the Doctor,' and requires to be, and indeed almost always is, an individual of some resource, for he practices his calling amid difficulties such as would utterly dismay a *chef de cuisine* on land. His kitchen, to begin with, is such a mine of a place that the wonder is that he can fry, roast, or boil anything in it; then it is provokingly subject to sudden inundations, partial deluges which come tumbling in as if in sport, playfully extinguishing his stove, and sending his provisions, cooking utensils, and seasonings sliding and spinning all around him; while if he is worth his salt he will still, in spite of all these difficulties, turn out such a meal for the cabin table as Soyer under the circumstances need not have blushed to own. As is befitting in the case of such a superior being, he has certain social advantages; he can smoke in his galley whenever he chooses; and he slumbers peacefully all night in the best bunk of the fore-cabin, blissfully unconscious of the existence or claims of port or star-board watches. The apprentices are not so well off, although a premium of from thirty to sixty guineas is sometimes paid for their term of four years; the only advantage they have is living apart from the crew. Their duties are the same as those of a fore-cabin boy, and they share the same food, which is sufficient in quantity, but often very bad as to quality.

On the 9th March the first Australian sea-birds were sighted; and on the morning of the 16th they cast anchor in Sydney Harbour, which, with its wooded hills sloping gently down to the sea, seemed to our apprentice a perfect paradise of beauty. At Sydney they remained a fortnight, enjoying the luxury of very good and very cheap dinners, for meat only cost from twopenny to fourpence per pound. After discharging their cargo, they sailed to Newcastle, sixty miles distant, to take in a cargo of coal, with which they sailed on the 23d April for Hong-kong, where they arrived on the 16th of June.

While at Hong-kong they had abundance of buffalo-meat, eggs, fruit, and soft bread, and plenty of hard work too, in washing out the hold of the ship, which had been much begrimed by the coals, to fit it for a cargo of tea. This the captain was unable to obtain, and was in consequence obliged to sail to Foo-chow, on the river Min, where, on the 13th of July, they arrived at Pagoda anchorage, so called from an old pagoda built on an

island in the river, which widens out here to the dimensions of a small lake. Here also they waited in vain for a freight of tea, and the captain at last resolved to take a native cargo of poles to Shanghai, and try for better luck there.

On the 14th September they entered the Yangtze-kiang, where they found the scenery flat and uninteresting, but yet home-like, for the river reminded them of the Thames below London.

In the course of a week they unloaded their timber, but still no freight of tea could be procured; and the captain, after some delay, resolved to return to Foo-chow, taking as ballast native goods and medicines, two dozen sheep, and two dozen passengers. On the voyage back to Foo-chow, the cook having abandoned his post in disgust at the sharpness of a new Chinese steward, our apprentice was induced to volunteer his services, and was formally installed in his new office at four o'clock one fine morning. He began his arduous task by trying to kindle a fire, which for more than an hour obstinately resisted all his efforts to make it burn. At last he succeeded in evoking a tiny blaze, and thankful at heart even for that small mercy, he placed upon his fire the copper with water for the breakfast coffee, and marched off elate to get the rations for the day. It chanced to be a pork and pea-soup day; and having got his supplies of pork and peas, he returned to his galley, and was horror-struck to find that the sea was washing into it every few minutes, sometimes sportively rising almost as high as the precious fire which had cost him so much trouble. In his anxiety to preserve this cherished flame, the little tub of pork, which he had put out of his hands for a moment, capsize, and its contents were washed swiftly round and round the galley, to the surprise and disgust of the unfortunate amateur. At last, giving chase, he succeeded in capturing them with a considerable admixture of cinders; and having placed the tub and its heterogeneous contents out of harm's way, he concentrated his energies upon the question of the moment, which was coffee.

Tired of waiting for the water to boil, he threw in the coffee, and then, to while away the time, he began to pare some potatoes, which, by some unaccountable fatality, as fast as they were pared rolled out of the basin in which he placed them, upon the floor. Whish! away went the ship, lurching heavily, and away went the tub of pork again; and pork, tub, and potatoes began chasing each other round the galley in gallant style, being kept in countenance by a couple of buckets, which went frantically clanging and clanking against each other and everything else that came in their way. Despair shews itself in many ways: at this crisis our apprentice laughed; and he was still grinning over his own mishaps, when the watch arrived, sharp set for their coffee.

They were by no means in a laughing humour when they learned how the land lay, and neither was he, for that matter, when they left him. Convinced that at all risks he must make the water boil, he frantically heaped upon the fire odd bits of rags and canvas; but the water had a will of its own, and boil it would not. Eight o'clock struck, and again they came, each holding out an empty hook-pot, which he filled with by no means the best grace in the world, trying, as he laddled out the vile mixture, to sink the coffee, which floated

like dust upon the surface. It would not do. First one man came growling back, and then another, and then the steward arrived to ask after the captain's potatoes. The captain's potatoes! He had forgotten all about them, and they had meanwhile been having a rare lark of it on deck, rattling first into one hole and then into another, until at last the greater number of them had scuttled overboard. What had he done? Had he been guilty of mutiny, insubordination, or gross carelessness as bad as either, on the high seas? In his panic he stepped back into the galley, which, for a wonder, happened to be free from water, and a hot coal falling out of the stove, burned his foot; and so ingloriously ended his career as cook.

At Pagoda Island the captain became seriously ill; and notwithstanding the most careful nursing on the part of his wife and our sailor apprentice, he passed away without ever having recovered consciousness, and was interred in the English cemetery at Foo-chow.

On the 6th November, the *Sea Queen* having loaded up, and being ready to start, a new captain came on board, the crew standing by the break of the fore-castle and keenly eyeing him as he stepped on deck. There was not much to look at in him. He was a middle-sized man, with a moustache and whiskers of a sandy red hue; and that he did not despise his creature-comforts was evident from the quantity of provisions that came on board next day. He was, however, not illiberal with his good things, but from time to time presented the apprentices' mess with some little delicacies. As for the question of questions always asked by a crew with regard to a new captain: 'Does he carry on?' that is, does he risk a large press of sail in a stiff wind, it had to be answered in the negative. He was, in fact, as timid as his predecessor had been, but from a different cause—he had always formerly commanded a steamer, and his new duties were strange to him.

They had now been at sea for several weeks, when one lovely evening our apprentice was with his watch on deck, and had just lain down for an hour's nap, when the after-bell was struck hurriedly three times. As it was his duty to keep the time, and as the three strokes had, moreover, nothing to do with the proper hour, he suspected that something was wrong with the helmsman, a Swede, Edghren Andrews, and was just about to verify his suspicion, when the man rushed up to him and said: 'Will you take the wheel for a minute? I feel very sick; perhaps a swig of cold tea will set me up.' He went to get it; and in a few minutes returned to his post, where he had scarcely been a quarter of an hour, when the bell was again struck twice. A second time he went to the helmsman's assistance, and on the poop met Andrews, who said he was worse than ever; whereupon our apprentice offered to finish up his time for him.

Next morning the Swede took him into the fore-castle and related the following curious story. The evening before, while at the wheel, he had suddenly seen the late captain on the weather-side of the poop, anxiously looking up at the sails and sky; and while he stared at him in mute surprise, he turned round angrily, and looked at him with such a horrible expression of face, that he dropped the wheel in a panic and rang the bell.

In Sweden, he said, ghosts were supposed to have a special dislike to a knife and to the Bible; so he rushed below to procure them, by way of charm; but although he could have got a whole bucketful of knives, he could not lay his hands upon a single Bible; and so he took instead a Swedish novel, thinking that as the late captain had not understood Swedish, it could not make much difference. He soon found, however, that he had reckoned without his host. He was no sooner set down to the wheel than the ghost reappeared, and approaching the binnacle, looked at the compass, and made angry signs to him to alter the vessel's course. So much for sea superstitions.

On boxing-day the ordinary routine of ship-life was broken by a terrible accident. The port watch had just finished tea, and had turned into their bunks for a smoke and a read, when a frightful clamour and trampling of feet got up overhead. In a moment every one was on deck, where all was in the wildest hurry and confusion. 'A man overboard!' was the cry. 'Who is it? Who is gone?' asked half-a-dozen voices. 'Johnson!' answered the second mate, excitedly hauling at a rope. 'Haul up the mainsail!' shouted the mate, in tones that rung clear and high above the uproar. 'Slack away the sheet, lads! Bear down on the clew garnets.' All was in vain: the sea was so high that the ship could not be brought round to the wind, and the captain would not hear of a boat being launched. 'It would only be very justly said, 'put more lives in jeopardy.' With breathless excitement the look-outs at each mast-head strained their eyes into the darkness of the wild night. The black waves were tumbling mountain high, and there, like a cork upon the billows, was their drowning messmate, slowly drifting astern to his doom. A cold shudder ran through the veins of the breathless watchers. Could nothing be done to help him? Nothing! The helmsman threw him a life-buoy as he passed; perhaps he seized it, perhaps he did not; he was never seen again.

On the 26th February they reached New York; and after unloading their tea, took in a cargo of grain and resin, and sailed for London on the 15th of March. It was a bad season of the year, and the ship was overlaid with grain, which makes a peculiarly heavy and unelastic cargo. The weather, stormy from the first, grew gradually worse until the 23d of March, when the gale freshened into a tempest, and that again into the wildest conceivable hurricane. Some frightful hours followed; the waves rolled along the bulwarks like mountains of blackish green water; the roar of wind and sea was inconceivably fearful, and suggested to the shivering crew the idea of something demonic. At last it became evident to all, that unless the sails could be got rid of, the ship would founder. Who was to risk his life in the attempt? What hero would be found to do this deed of courage? As usual the hour brought the man in the person of Jack Andersen, a Swedish sailor. With his open knife between his teeth, this brave fellow sprang along the encumbered deck undaunted by a heavy sea which broke over him; and soon a loud explosion told of his success; the last sail was gone, and the *Sea Queen* lay like a helpless log upon the waters. At three in the morning a lull occurred, and the wind and sea gradually went down; but, the vessel continuing

to sink deeper in the water, it was necessary to lighten her, and fifty tons of cargo were thrown overboard. The sacrifice saved her; and on the 1st of April they sighted the welcome Lizard light. As for the suffering and discomfort on board subsequent to the storm, it was simply inconceivable. Our apprentice's chest floated bottom up for days; and his log-book, which was locked up in it, got a thorough soaking, which fortunately did not render it illegible, else we should have missed a very graphic and interesting narrative of life at sea.

'ONLY TRIFLES'

WHEN tempted to scorn the little duties of our calling, let us think of such sayings as the following. One day a visitor at Michael Angelo's studio remarked to that great artist, who had been describing certain little finishing 'touches' lately given to a statue.—'But these are only trifles.' 'It may be so,' replied the sculptor; 'but recollect that trifles make perfection, and perfection is no trifle.' In the same spirit the great painter Poussin accounted for his reputation in these words—'Because I have neglected nothing.' It is related of a Manchester manufacturer, that, on retiring from business, he purchased an estate from a certain nobleman. The arrangement was that he should have the house with all its furniture just as it stood. On taking possession, however, he found that a cabinet which was in the inventory had been removed; and on applying to the former owner about it, the latter said: 'Well, I certainly did order it to be removed; but I hardly thought you would have cared for so trifling a matter in so large a purchase.' 'My lord,' was the reply, 'if I had not all my life attended to trifles, I should not have been able to purchase this estate; and excuse me for saying so, perhaps if your lordship had cared more about trifles, you might not have had occasion to sell it.' 'Oh, what's the good of doing this and that?' we say in reference to departments of our business where quick returns are not forthcoming, or where success does not at once stare us in the face. When Franklin made his discovery of the identity of lightning and electricity, people of this baser sort asked with a sneer 'Of what use is it?' The philosopher's retort was: 'What is the use of a child? It may become a man!' Apropos of this remark, grown-up people should remember while doing improper things in the presence of him who is 'only a child,' that he will one day become a man just like themselves.

Mr Careless Nevermind and Miss Notparticular think that great men only deal with great things. The most brilliant discoverers were of a different opinion. They made their discoveries by observing and interpreting simple facts. When fools were walking in darkness, the eyes of these wise men were in their heads. Galileo's discovery of the pendulum was suggested to his observant eye by a lamp swinging from the ceiling of Pisa Cathedral. A spider's net suspended across the path of Sir Samuel Brown, as he walked one dewy morning in his garden, was the prompter that gave to him the idea of his suspension bridge across the Tweed. So trifling a matter as the sight of seaweed floating past his ship, enabled Columbus to quell the mutiny which arose amongst his sailors at not discovering land, and to assure them that the

eagerly sought New World was not far off. Galvani observed that a frog's leg twitched when placed in contact with different metals, and it was this apparently insignificant fact that led to the invention of the electric telegraph. While a bad observer may 'go through a forest and see no fire-wood,' a true seer learns from the smallest things and apparently the most insignificant people. 'Sir,' said Dr Johnson to a fine gentleman just returned from Italy, 'some men will learn more in the Hampstead stage than others in the tour of Europe.' Certainly the power of little things can never be denied by Englishmen who reflect that the chalk cliffs of their island have been built up by little animals—detected only by the help of the microscope—of the same order of creatures that have formed the coral reefs.

Perhaps it is not too much to say that England owes her reputation of being the best workshop in Europe not so much to the fact that she is rich in coal and iron, as because her workmen put or used to put a good finish on their work. A country must become and continue great when its labourers work honestly, paying attention to detail, putting conscience into every stone they place and into every nail they drive. There is no fear of England declining so long as it can be said of her workers what was said of the Old Masters in statuary, painting, and cathedral-building:

In the elder days of art,
Builders wrought with greatest care
Each minute and unseen part,
For the gods are everywhere.

How much of this honest workmanship, that careth for little things and not merely for the large and showy, is to be seen on the roof of Milan Cathedral! Here the smallest and least visible statue of the statue forest that tops the building, is carved with quite as great care as the largest and most conspicuous.

It has been remarked that we cannot change even a particle of sand on the sea-shore to a different place without changing at the same time the balance of the globe. The earth's centre of gravity will be altered by the action, in an infinitely small degree no doubt, but still altered; and upon this will ensue climatic change which may influence people's temperaments and actions. Of course this is an absurd refinement; but it illustrates the undoubted fact that the most trivial thought and act in our lives carries with it a train of consequences, the end of which we may never guess. The veriest trifles become of importance in influencing our own or other people's lives and characters. One look may marry us. Our profession may be settled for us by the most trivial circumstance. 'A kiss from my mother,' said West, 'made me a painter.' Going into an inn for refreshment, Dr Guthrie saw a picture of John Pounds the cobbler of Portsmouth teaching poor ragged children that had been left by ministers, ladies, and gentlemen to go to ruin on the streets. The sight of this picture hanging over the chimney-piece on that day, made Dr Guthrie the founder of ragged schools.

On a clock in one of the Oxford colleges is inscribed this solemn warning to those who fancy that killing time is not murder: *Periunt et impunitur* (the hours perish and are laid to our charge). But is not this equally true of those 'odd moments'

during which we say it is not worth while commencing or finishing anything? Mr Smiles tells us that Dr Mason Good translated Lucretius while driving from patient's house to patient's house; that Dr Darwin composed nearly all his works in the same way; that Hale wrote his *Contemplations* while travelling on circuit; that Elihu Burritt while earning his living as a blacksmith mastered eighteen ancient languages and twenty-two European dialects in 'odd moments'; that Madame de Genlis composed several of her volumes while waiting for the princess to whom she gave daily lessons. Kirke White learned Greek and J. S. Mill composed *Logic* as they walked to their offices. Many of us get into a fuss if the dinner be not to the moment. Not so did D'Aguesseau, one of the greatest Chancellors of France, act. He used this *mauvais quart d'heure*, for he is said to have written a large and able volume in the intervals of waiting for dinner. Wellington's achievements were mainly owing to the fact that he personally attended to such minutiae as soldiers' shoes, camp-kettles, biscuits, horse-fodder; and it was because Nelson attended to detail in respect of time that he was so victorious. 'I owe,' he said, 'all my success in life to having been always a quarter of an hour before my time.' 'Every moment lost,' said Napoleon, 'gives an opportunity for misfortune.' Well would it have been for himself—as his bitter end proved—had this European bully known another fact—that every moment selfishly employed is worse than lost, and 'gives an opportunity for misfortune.' However, he attributed the defeat of the Austrians to his own greater appreciation of the value of time. While they dawdled he overthrew them.

It may be said that 'it is the pace that kills—that people nowadays are more prone to wear themselves out by overworking than to rust unused.' But is it not over-anxiety and want of method, rather than overwork, that kills us? Methodical arrangement of time is like packing things in a box; a good packer will get in half as much again as a bad one.

Little words and acts far more than great ones reveal the manner of a man. No one—in Great Britain at least—could be such a Goth as to rest his heels on the mantel-piece or to spit when sitting in the company of ladies round a fire. It is not, however, given to all to continue sinless as regards these many little things that mark the naturally refined man. Women are said to be better readers of character than men, and perhaps the reason is this: character is shewn by minutiae, and the fine intuition or mental sharp-sightedness by which these are discerned, belongs to women in a greater degree than to men.

Without caring in the smallest degree for goodness, we may avoid crime and gross sin because of the police, or because we desire to get on in the world, or because we are afraid of ridicule. The test, therefore, of a fine character is attention to the minutiae of conduct. Nor does the performance of those large duties which are almost forced upon us prove our love to God or to man nearly so convincingly as do the little commonplace services of love—the cheerful word, the cup of cold water—when rendered not grudgingly or of necessity. By little foxes tender grapes are destroyed, according to Solomon. Little foxes are very cunning and most difficult to catch; and so are those little

temptations by which our moral natures are gradually eaten away. The tender grapes of many a Christian branch are destroyed by such little foxes as temper, discontent, avarice, vanity. Many who could resist much greater sins yield to these. There is an excitement in the very greatness of a trial or temptation which enables us to resist it; while the chase after little foxes is dull and uninteresting. No wonder that when we analyse the lives of those who have ruined themselves morally, we generally discover that

It was the little rift within the lute

That, ever widening, slowly silenced all;

Or little pitted speck in garnered fruit,

That, rotting inward, slowly mouldered all.

How many people are almost successful, missing their aim by 'Oh, such a little!' Minutiae in these cases make or mar us. 'If I am building a mountain,' said Confucius, 'and stop before the last basketful of earth is placed on the summit, I have failed.' The examination is lost by half a mark. One neck nearer and the race would have been won. The slightest additional effort would have turned the tide of war. 'Thou art not far from the kingdom of God,' were solemn words, marking the terrible difference between almost and altogether.

A MASONIC INCIDENT.

WHEN the Territory of Kansas applied to the government at Washington for the privilege of adding another star to the national flag—now nearly twenty-five years ago—conflicting interests were involved in the very important question as to whether she should enter the Union as a free or a slave state. Some of the foremost abolitionists of the North were determined that no territory should be added to the Union as a slave state; Southerners were equally resolute that the limits of slavery should no longer be circumscribed; while others, affecting a more moderate temper, offered to leave the settlement of the matter to the people themselves who sought the more extended national relationship. At this time the public mind was in a highly excited condition. The effect of the iniquitous 'Fugitive Slave Law'—passed in a spirit of conciliation towards the South, and for assisting which, by his vote, the illustrious Daniel Webster sacrificed much of his well-earned reputation—had not died away when, in 1852, the statute was suddenly put into practical operation in the city of Boston, and a scene was there enacted which is without a parallel in American history. A negro named Burns having escaped from bondage, settled in Boston, and for some years had earned an honest living as a waiter at hotels and in sundry other occupations in which men of his race were accustomed to be engaged. The Fugitive Slave Law empowered slaveholders to follow runaways into free states and remove them therefrom; and Burns' owner having discovered the fugitive's whereabouts, resolved on the exercise of his newly-acquired rights. Burns was arrested and lodged in jail. The news spread with the speed and effect of an electric shock. The whole city was moved. With

youthful ardour many of the students of Harvard College (located at the neighbouring suburb of Cambridge) assailed the prison, with a view to the forcible liberation of the captive. So quickly had the riot assumed a portentous aspect, that a large force of police and soldiery was called into requisition to quell the disturbance. The representatives of the law succeeded in at once restoring peace and in placing in custody many of the students and other citizens who had attempted, though in vain, to render a humane service to an oppressed fellow-creature.

The quiet of the following day—Sunday—failed to allay the excitement which had seized the public mind. As the people issued from the various places of worship the proceedings of the previous day formed the general theme of conversation; groups of eager citizens were to be seen here and there discussing the outrage which had been perpetrated in the very 'cradle of liberty' itself.

Those who had been placed under arrest were, however, liberated shortly afterwards; and so soon as the necessary legal preliminaries were settled, arrangements were made for the transfer of the negro to his owner. Early on the morning of his removal, the streets in the neighbourhood of the jail were strictly closed against all traffic, by ropes, guarded by police, traversing their approaches. A cannon was placed in position on the court-house steps; and, still further to secure the captive against any probable attempt at rescue on the part of the populace, the police, supported by cavalry in the rear with drawn sabres, lined the thoroughfares through which he had to walk to the harbour, where a vessel was in readiness to convey him southwards. To add significance to this extraordinary scene, a coffin was suspended in mid-air on ropes running diagonally from the upper windows of the four corners of Washington Street, where it is intersected by School Street on the west and State Street on the east—the avenues through which Burns would pass—and most of the buildings in this locality were draped in mourning. Such space as was available for spectators was filled to overflowing with expectant citizens. The surging masses swayed to and fro with excitement; and when the slave appeared in charge of the officials, the murmured execrations of an indignant but law-observing multitude arose as incense. The ship lying in the harbour received him on board, and a fair wind soon wafted him beyond the reach of any manifestation of Northern sympathy.

Such, then, was the state of public or, rather, Northern feeling when Kansas, as already stated, applied for admission into the Union. The slaveholders of the South, and all in sympathy with them, adopted measures for influencing and, indeed, of controlling public opinion in Kansas on this great question; and to achieve this end, mercenary agents were employed to foster such 'slave' proclivities as might be apparent, and to instil them into the minds of the people, if their political sentiments were found to be tinged with

'free' tendencies. Not only was this virtually acknowledged, but it was discovered that preparations had been made for the exercise of physical force if need be. The Northerners, and more especially the abolitionists of the New England States, impelled by a righteous impulse to neutralise, as far as lay in their power, every unscrupulous endeavour to extend slave territory, sent arms to the inhabitants, to enable them to meet force with force. Jealousy of political ascendancy culminated in aggressive measures being adopted by the pro-slavery party. Espionage, with its attendant evils, was organised: men were tailed and feathered, and ridden on a rail or lynched, until the 'border warfare' was an acknowledged fact.

At this juncture, a literary gentleman named S—, strongly imbued with Northern zeal, but lacking the discretion which should accompany every important and worthy undertaking, decided on venturing into the midst of the disturbance, for the purpose of advocating anti-slavery principles by establishing an 'abolition' newspaper. He took a printing-press, type, paper, and such appliances as were required. His wife, not deterred by the length of the journey or the dangers which attended it, insisted on accompanying him on his perilous enterprise. After a journey of about one thousand five hundred miles, he settled near Fort Leavenworth, not far from the Missouri river, and soon completed his arrangements for starting his paper. Considering his surroundings, it was not likely that any great length of time would elapse before he acquired a reputation as a dangerous political intruder. His first issue startled the people immensely; but whether his anti-slavery vagaries, as they were considered, should be resented, or laughed at as an evidence of playful temerity, was for the moment a moot-point. The times, however, were not laughing times, and he was speedily a marked man. Intimations were conveyed to him by the process known as 'underground' that he had better relinquish his undertaking and hurry home to the east; and that in the event of his non-compliance with these hints, he would be waited upon by certain parties who made such matters their special vocation. In spite of these warnings, he continued to publish his unsavoury journal.

Amongst those who assumed the surveillance and guardianship of the public weal, political and moral, was one Dick M—. Dick was reputed to have been of respectable parentage, and to have spent his early days in peaceful circles; but the allurements of a desperado's life charmed him away to the sphere of action in which he was now engaged. His belt was amply supplied with the means of offence or defence, just as his 'appurtenances' might be required; and whether accompanied in his inquisitorial migrations by his followers or not, never failed to make his presence felt. In short, Dick was one of the most daring and blood-thirsty ruffians that could be encountered, and wherever he presented himself, dismay was widespread.

Very early one morning, as S— was printing his paper preparatory to its distribution, his office door was opened and several men entered. The ceremony of a formal introduction was dispensed with; his printing-press was smashed, his property destroyed, and the office itself quickly demolished.

Dick—for it was he—and his comrades arrested S—; but his wife was permitted to take leave of her husband on promising to return eastward without delay. The parting, under such circumstances, may readily be imagined; but in the absence of efficient protection to life and property, no reasonable alternative was left; the separation must be.

S— was speedily marched by his ignominious escort towards the Missouri. It was usual in such cases to 'string up' the delinquent to the first tree the parties met with; but on this occasion it was intended to convey the prisoner to such a place as might enable them to invest their proceedings with more than the customary spectacular effect. Such desperadoes considered it beneath their manly dignity to travel far without refreshment; they therefore soon stopped at a tavern to satisfy their conventional thirst. S— was placed in an arm-chair at the end of the saloon, while the masters of the situation lounged around the bar. Presently, Dick sauntered up to his captive and entered into conversation with him.

'Wal, stranger,' said Dick, 'I reckon you had better ha' stayed at New York, instead of coming to Kansas with them abolition notions o' yours; we don't want no abolition out at Kansas.'

'I did not come out here,' S— mildly answered, 'for the purpose of creating discord, for it already existed; but simply and honestly to promulgate views which, in my conscience, I believe to be right; and I did it because it is right.'

'Wal,' blustered Dick, 'that kind of talk may do away at New York, but I callate it won't amount to nothin' out here. I can't believe any man would be sech a fool as to do sech a thing 'cause he believes it right. I don't believe you, nohow.'

'Well,' replied S—, 'if you were a member of a society I belong to, you would believe me.'

'What do you mean, stranger?' asked Dick with an air of wonderment.

S—, conscious of the hopelessness of his position, and fearing almost momentarily to be put to death, ventured: 'If you were a mason'—accompanying the remark with a certain sign usual in such emergencies—'you would believe me.'

To his utter amazement and infinite satisfaction, this chief of villains proved to be a freemason, having joined the fraternity in his reputable days, and fortunately for S—, still respected his obligations.

'Wal, brother, this is a kind o' awkward,' said Dick, in an altered and friendly tone; 'but I reckon I must save you. The boys will be mighty ugly though, when they see how things is. Now, when you hear the steamer whistle as she comes down the river, keep close to me, and follow me on board. I'll lock you in a cabin on deck, and as I know the cap'n, I'll make it all right. But look alive when she comes.'

They had not to wait many minutes before a shrill whistle announced the steamer's arrival. All left the tavern together, Dick marching ahead, and holding S— by the arm, as if leading an unwilling captive. As these two stepped on the plank thrown out for passengers to walk on from bank to deck, the 'boys' intuitively perceived the state of things, and made a rush towards the plank. Dick was equal to the occasion.

'Now, boys, make tracks!' said he in a tone

and manner that made obedience other than impossible. They accordingly withdrew, muttering threats of vengeance at the loss of their prey.

Dick hurried S— into a deck cabin, and without waiting for any expression of thanks for the service he had rendered, locked the door, and hastened to make all right with the 'cap'n,' according to promise. In a few moments the engines moved, the paddles revolved, and the steamer was under weigh for St Louis. Here S— disembarked; and again taking steamer for Alton, and thence cars to Cincinnati, was not long in meeting his wife in New York.

S—'s anti-slavery sentiments continued to the last as strong as in his early days, though, having an ever vivid recollection of his visit to the southwest, his utterance on this particular theme grew somewhat feeble. There was one topic, however, on which he waxed eloquent, and that was his gratitude to freemasonry for having, under Providence, preserved him from certain death.

FIGHTING FOR LIFE.

A STORY OF A WELSH COAL-MINE.

IN all parts of the habitable globe wherever the English language is spoken, a thrill of admiration must have passed through every English heart at the brave deed which was, in the earlier part of this year, accomplished in the Welsh coal-pit at Troedryhiw.

There are times when a display of national pride is not only justifiable but necessary; and it is a splendid victory gained for humanity when we see a whole nation, heedless of every other event which is taking place around her, hanging breathlessly and with anxious face over the mouth of a pit in which a few poor miners are engaged in a hand-to-hand struggle with Death; tortured with doubts as to whether the imprisoned miners in the Troedryhiw Colliery would endure their fearful hardships long enough to enable themselves to be snatched from a living grave. Happily, they did so, and were saved by the indomitable bravery of their fellow-miners. The whole story is one more splendid instance of the noble qualities which are innate in the breasts of those who form the sinew and the backbone of Britain; qualities that have won for her undying glory in war or peace, and by flood and field. How bravely death can be faced, and how bravely fought even in moments of doubt and despair, and at the risk of terrible perils deliberately encountered, is shown by this story.

A miner's life is at all times a subject for grave study, for he must by mere necessity be a brave man, knowing as he does that every time he descends the shaft he literally carries his life with him in his hands. Indeed this thought must cross the mind of the most hardened man; and when he reaches the pit, the feeling must be intensified, for here his responsibility increases with every step he takes along the glistening black galleries of the mine. Not only has he his own life, but also the lives of others, now in his hands;

and the striking of a match may in an instant consign hundreds of his fellow-creatures to a fearful death in the bowels of the earth.

It was the writer's privilege, some few years since, to pay a visit to one of the largest and finest coal-pits in England—the Sheepbridge Colliery, near Chesterfield; the galleries of which extend in several directions for a long distance, covering altogether about three miles of ground, and passing in one place beneath a small lake. The sensation one experiences on descending the shaft, and seeing the light of day fading rapidly from view, is almost indescribable; and is only equalled by the exquisite feeling of relief which pervades the mind on once again returning to the surface.

An amusing incident occurred during our visit, which, though it was the cause of much hilarity at the moment, would seem on reflection to be, perchance, the innocent cause of many great disasters in coal-mines. As is probably well known, the miners in many pits, especially in those which are considered free from fire-damp or gas, work by the light of candles, which are stuck here and there against the walls of coal, a reserve of candles lying near at hand. These candles, the rats—the only living companions of the miners—make free use of when they can get a chance; and while we were watching the digging of some coal, one of these creatures came stealthily up to the spot and ran off with the lighted candle in its mouth. A volley of coal and curses flew after the robber; but it kept on its course until both rat and candle disappeared from view. But to our story.

It was on the evening of the 11th April, when the miners in the Troedyrhiw Colliery were leaving their work, that a roar of rushing waters was heard. The sound is one that is too well known to the ears of experienced pitmen, and the men at once fled to the shaft and were raised to the surface; but on arrival at the pit's mouth, fourteen of their number—men and boys—were seen to be missing. In an instant and without the slightest hesitation, volunteers nobly stood forward to undertake the task of rescue, and immediately descended the pit again, for the purpose, if possible, of bringing their fellow-miners to the 'bank' in safety. It was found that the water had broken into the mine through some old abandoned workings, and was flowing into all the stalls, headings, and galleries into which the mine was divided. The volunteers found also that all the workings within a few hundred yards of the bottom of the shaft were filled with water up to the roof, and it was at first concluded that all the fourteen missing ones were drowned. A knocking was, however, heard, as if some of the men were confined behind a wall of coal accessible from the outside; and the volunteers at once determined to cut through this wall, which they believed to be about twelve yards thick. The imprisoned men worked from their side too; and in a few hours the obstruction was so far removed as to enable the two parties to speak to each other. The tale

of the imprisoned men was, that the water was rapidly gaining on them, and one of them struck through the coal to escape from the rising water. But from one peril they immediately passed to another, for a violent explosion followed, and one poor fellow, Thomas Morgan, was found jammed to death in the hole which had been cut. This sad accident was caused by the sudden escape of air which was pent up in the 'stall' in which they had stood out of the way of the water, and the act of making the hole through the coal in so sudden a manner was equivalent to applying a match to a heap of powder or pulling the trigger of a gun. It was fortunate they were not all killed by the explosion.

After this, knockings were heard farther on in the mine; and it was soon made evident that the position of the other nine men was worse than that of the miners just reached. The wall behind which they were imprisoned was in a heading that was entirely flooded, and they could only be reached after part of the water had been pumped out. Divers were here employed, who went boldly into the flood, and gallantly endeavoured to proceed through the half mile of water which lay between the shaft and the imprisoned miners; but these were unwillingly compelled to relinquish the attempt. On Monday, however, four days after the flooding of the mine, the water was so far reduced as to allow the work of cutting through the coal to be commenced. And here we must pause to mention that this was done with a powerful pumping apparatus, which, with all its appliances, had to be properly and cautiously fitted up before it could be put into successful operation. The poor fellows below had been without food for some five days now, and it thus became a question of patient endurance on the one hand and of unceasing labour and noble efforts on the other. And never did men work more nobly than did those who were thus doing all that lay in the power of man to save the lives of their devoted comrades.

In spite of their indefatigable efforts, however, day after day passed by without any apparent result, for they had to cut through *forty* yards of *solid coal*, and the difficulty increased as the intervening wall became thinner. The anxiety of all concerned may be imagined when we remind our readers that this immense block of coal could only be penetrated at the rate of a yard per hour. But relays of men worked night and day with unrelenting zeal until at length their efforts were rewarded with success. The imprisoned men were heard, and were able not only to speak to their deliverers, but also to give directions as to the course of the cuttings. 'Make haste! make haste!' was the plaintive cry which now nerved the hands and arms of the heroic workers, for it was like a voice from the grave which thus reached their ears.

Questioned as to their mode of existence in the mine, the prisoners said they had eaten absolutely nothing, that they were all very weak, and two of their number were completely prostrated. There were only four men and a boy there, the other four having been cut off from their fellows, and had, as since ascertained, perished. The little boy piteously implored the workers to make a hole for him to creep through to his mother. But in spite of their willing hearts, the brave

toilers were compelled to proceed more slowly and cautiously than before, in order to prevent the recurrence of a second disaster, by the too sudden escape of the pent-up air. And in addition to this, there was great danger of themselves being engulfed in the waters or killed by the gas, which soon began to make its unwelcome presence felt. Food was passed along a tube to the imprisoned men; but the tube did not work well, and it was eventually found that they had not received the much-desired refreshment. At the last moment, when the hole had been made and the compressed air was let out, a rush of gas took place which put out all the lamps and compelled the workers to return to the 'bank.' What must have been the horror of that moment to those poor fellows within the mine when they heard the retreating footsteps of their anxiously awaited deliverers!

Gloomy indeed was the prospect at this critical moment, for it had now become a question of life and death to either party; but were the men who had been rescued thus far to be left after all to the death which seemed to hunger for them? Perish the thought! and perish rather every Englishman who stood at the pit's mouth than that no attempt should be made to complete and crown the splendid story of those past eight days. The danger of carrying lights in the gas-charged mine being too great to be ignored, brave men came forward and volunteered to go down *without lamps* to the rescue of the five miners whom it was now known were the only ones who had survived that fearful time. Down they went into the black pit, carrying food with them, and on making another hole a gallant collier went into the mine and fed the poor fellows. All honour to him! It was a greater deed than the capture of an enemy's colours on the battlefield.

The rescued men and the boy were then brought to the surface, and placed under the care of experienced doctors, who pronounced favourably on their condition. For ten long weary days they had languished in the darkness of what seemed to them a living tomb, yet they murmured not, but lifted up their united voices in prayer to the great Creator of all.

The entombment of nine men, five of whom were known to be in a certain place, and could be saved by cutting through some forty yards of coal, made the question one of time and dogged perseverance on one side, and of hunger and patient endurance on the other. It is just on such occasions as these that the really splendid qualities of the collier shew themselves in bold relief, and turn a pitman into a hero.

Such a deed as this was certain to attract the sympathy of the gracious Lady who has ever the welfare of her people at heart; and the Queen hastened at once to give expression to the national feeling of admiration for these brave men, by extending the institution of the Albert Medal for saving life at sea to similar acts performed on land, and giving directions that these humble Welsh miners should be the first recipients of the honour.

A national subscription was also opened by the Lord Mayor, and a large sum collected for the rescued and their rescuers, sufficient to place them beyond the reach of poverty, and shew the world that England will not willingly let die the remembrance of as noble and heroic a deed as ever graced the annals of a Christian people.

QUACK MEDICINE.

Our ably conducted contemporary, *The Queen*, has the following useful remarks on the use of Quack Medicine:

"The belief in quack medicine is one which exists in strength proportioned to the ignorance of the persons who take it. There are certain charms, to some minds, in being able to "doctor" themselves, and to do without the properly authorised medical practitioner. There seems to be with these persons a sense that, in not having paid a fee for advice, they have in a manner gained something. There appears to be also a love of experiment, with a sense behind it that, if their own experiment fails, they can at worst fall back on the skilled physician to amend their mistakes, and to set them up again according to the known and acknowledged rules and practices of medical science. Moreover there is a kind of belief in empirical treatment, which is probably a "survival" from the ancient belief in charms and witchcraft; else how can people possibly put trust in medicines which are advertised as being adapted to cure all manner of diseases of thoroughly differing characters?

"But even among quack medicines there are degrees. There are some of which ordinary medical men readily avail themselves, and which under proper direction may be found really useful. The danger with regard to them is that persons finding such to be useful in the doses prescribed by their medical advisers, take doses on their own responsibility, which prove hurtful, sometimes even fatal in their effects. On the other hand there are a few—though we must confess very few—whose virtues chiefly arise from the faith with which they are taken; and these are as innocuous to the patient as they are profitable only to the vendor. But a very large class—in fact by far the largest—are really positively hurtful. They are described by titles which give no real idea of their character and composition, and they are taken by people much to their harm.

"In a recent number of the *Lancet* the public were warned against a seemingly harmless preparation, from the effects of which a medical man had found some of his patients seriously suffering. He found that lozenges called "castor-oil lozenges" were being largely used among his patients, who were under the impression that they were taking castor-oil in a form slightly less disagreeable than the usual one. On examination he found that each of these lozenges contained three grains of calomel; and it is not a matter of astonishment that he found some persons who had taken them suffering from severe mercurial salivation. He has found these lozenges sold by grocers, oilmen, chandlers, and even by surgeons and chemists, and the mischief done has been very great. The writer of the letter asks whether the Adulteration Act cannot be brought to bear upon those who sell this "pernicious confectionery;" but the bringing an Act to bear upon an evil is a slow process. The true preventive of mischief from the use of quack medicine is entire abstinence from its use. Who can doubt the propriety of this advice? Let quack medicines be universally abandoned.

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A STRANGE FAMILY HISTORY.

For the following curious episode of family history we are indebted to a descendant of one of the chief personages involved; his story runs as follows.

Somewhat less than one hundred years ago, a large schooner, laden with oranges from Spain, and bound for Liverpool, was driven by stress of weather into the Solway Firth, and after beating about for some time, ran at last into the small port of Workington, on the Cumberland coast. For several previous days some of the crew had felt themselves strangely 'out of sorts,' as they termed it; were depressed and languid, and greatly inclined to sleep; but the excitement of the storm and the instinct of self-preservation had kept them to their duties on deck. No sooner, however, had the vessel been safely moored in the harbour than a reaction set in; the disease which had lurked within them proclaimed its power, and three of them betook themselves to their hammocks more dead than alive. The working-power of the ship being thus reduced and the storm continuing, the master determined to discharge and sell his cargo on the spot. This was done. But his men did not recover; he too was seized with the same disease; and before many days were past most of them were in the grave. Ere long several of the inhabitants of the village were similarly affected, and some died; by-and-by others were smitten down; and in less than three weeks after the arrival of the schooner it became evident that a fatal fever or plague had broken out amongst the inhabitants of the village.

The authorities of the township took alarm; and under the guidance of Squire Curwen of Workington Hall, all likely measures were taken to arrest or mitigate the fatal malady. Among other arrangements, a band of men was formed whose duties were to wait upon the sick, to visit such houses as were reported or supposed to contain victims of the malady, and to carry the dead to their last home.

Among the first who fell under this visitation

was a man named John Pearson, who, with his wife and a daughter, lived in a cottage in the outskirts of the village. He was employed as a labourer in an iron foundry close by. For some weeks his widow and child escaped the contagion; but ere long it was observed that their cottage window was not opened; and a passer-by stopping to look at the house, thought he heard a feeble moan as from a young girl. He at once made known his fears to the proper parties, who sent two of the 'plague-band' to examine the case. On entering the abode it was seen that poor Mrs Pearson was a corpse; and her little girl, about ten years old, was lying on her bosom dreadfully ill, but able to cry: 'Mammy, mammy!' The poor child was removed to the fever hospital, and the mother to where her husband had been recently taken. How long the plague continued to ravage the village, I am not able to say; but as it is about the Pearson family, and not about the plague I am going to write, such information may be dispensed with.

The child, Isabella Pearson, did not die; she conquered the foe, and was left to pass through a more eventful life than that which generally falls to the lot of a poor girl. Although an orphan, she was not without friends; an only and elder sister was with relatives in Dublin, and her father's friends were well-to-do farmers in Westmoreland. Nor was she without powerful interest in the village of her birth: Lady Curwen, of the Hall, paid her marked attention, as she had done her mother, because that mother was of noble descent, as I shall now proceed to shew.

Isabella Pearson (mother of the child we have just spoken of), whose maiden name was Day, was a daughter of the Honourable Elkannah Day and of his wife Lady Letitia, daughter of the Earl of Annesley. How she came to marry John Pearson forms one of the many chapters in human history which come under the head of Romance in Real Life, or Scandal in High Life, in the newspaper literature of the day. Isabella's parents were among those parents who believe they are at liberty to dispose of their daughters in marriage

just as they think fit, even when the man to whom the girl is to be given is an object of detestation to her. Heedless of their daughter's feelings in the matter, they had bargained with a man of their acquaintance, to whom they resolved that Isabella should give her hand—be her heart never so unwilling. The person in question was a distant relative of their noble house, had a considerable amount of property in Ireland, and was regarded, by the scheming mother especially, as a most desirable match for her daughter. But what if the young lady herself should be of a contrary opinion? In the instance before us the reader will be enabled to see.

Captain Bernard O'Neil, the bridegroom elect, was nearly twice the age of Isabella Day; and although not an ill-looking man, was yet one whom no virtuous or noble-minded girl could look upon with respect, for he was known to be addicted to the vice of gambling, to be able to consume daily an enormous quantity of wine, and to be the slave of all sorts of debauchery. So habituated had O'Neil become to these degrading vices, that no sensible girl could hope to reclaim and reform him. The gratification of his propensities had been spread over so long a time that his entailed estate had become heavily burdened with debt, whilst his creditors, even his dependents, were clamorous for the money which he owed them.

Such being the man to whom the Honourable Elkanah Day and his noble wife had agreed to give their daughter, can it be wondered at that that daughter should not only be indisposed to comply with their wish, but should also be so disgusted and indignant at its expression as to give way to her feelings in words and acts which in themselves are incapable of justification? One day the captain had called at the house by appointment to arrange for the marriage, being anxious to have it consummated, that he might be helped out of a pressing embarrassment through the portion which he knew would be given to his bride. Isabella had been present at the interview. Her father and mother knew full well that she was far from being pleased with the match, but of this they took little heed, believing that once married, their daughter would reconcile herself to her lot, even if she did not derive much felicity from the union. The girl herself knew that no language of hers, whether of anger, sorrow, or entreaty, would avail, especially with her mother, who was one of the most hot-headed and stubborn of women; so from the first her mind was made up rather to circumvent than to oppose them; to cheat them in the game they were playing, if she could not by fair-play win the right to give herself where she could love and be loved.

On the occasion referred to, it had been arranged that the marriage should take place in a fortnight; and when she was urged to make the necessary arrangements, instead of yielding a hearty compliance, as in a different case she would naturally have done, she gave a feeble assent and left the room. No sooner had she put the door between herself and the other parties, than the emotions which she had managed to keep under while in their presence began to rage within her, and with the hope of finding sympathy below-stairs which was denied her in her proper domain, she sought the company of the maids. Wrath is

seldom discreet, and grief at times is not overnice in selecting those before whom it vents itself. So without waiting to consider the rank of those whose company she had sought, or taking into consideration the consequences which might ensue on making known to them the circumstances in which she was involved, she gave expression to the feelings which were agitating her at that moment by exclaiming: 'So I am to be married in a fortnight, am I? And to that horrible O'Neil? Never, my honourable father; never, my lady mother! Never, no never! By God's aid, *never*. Rather than do so, I'll marry the first man who can be found willing to take me, and go with him to the ends of the earth!' Saying which, she fled from the kitchen into the garden at the rear of the house, and in the summer-house found relief in a flood of tears. All this occurred in Dublin.

Now the cook was one of those who heard the poor girl utter these passionate words. She was an old and esteemed servant of the family, and as such had more liberty and could use more freedom than servants in general. She had been in the family when Isabella, twenty years before, was born, had been her nurse, and was therefore greatly attached to her; and she felt more keenly the fate which the poor girl dreaded, than any others who were present. Indeed so afflicted was she on her account, that she sought her in the summer-house, and poured into her ear all the soothing and encouraging words she could think of. The girl's rage had abated, but she was in a condition of affliction and misery which was truly pitiable to behold. She was, however, still determined not to link her life to one whom she utterly detested, and besought her old and devoted friend to aid her in seeking in flight what she could not otherwise avoid. Whether the cook promised to do so, or what exact reply she made, I am not able to relate; but that very night an event took place which decided her fate, and gave to her after-life its direction and character. The cook was a native of Westmoreland, had been brought up in the neighbourhood of Farmer Pearson, whose son John was at that time a private in the Royal Guards stationed in Dublin. He and the cook were therefore old acquaintances, and when John had an hour to spare, he often spent it in her company. That very night he happened to pay her a visit. In course of conversation she told him about her grief arising out of the trouble of her young mistress, and added thereto the wild expression to which she had that day given utterance. This was done by the simple-minded woman without the least design either of aiding or injuring the young lady, nor had she at that moment the slenderest suspicion that her act would have any practical effect on the young soldier. But it was otherwise. He knew the girl by sight, and she knew him. Though they had not exchanged a word, nor been for even a moment in each other's company, yet they had on several occasions seen each other when he had been visiting his friend the cook. He was a fine open-hearted generous fellow, in the heyday of youth, fearless and brave. All his sympathies were aroused and drawn to the side of the suffering girl; and believing that he would be doing a truly manly act in rescuing her from what he regarded as worse than a thousand deaths,

he told the cook that he was prepared to go with her to the ends of the earth, should she be willing to trust herself to his care and fidelity; and he got his friend to promise that she would make his readiness known to her young mistress. Though the promise was made, it is but fair to say that in giving it the cook had not the smallest idea that the poor girl would do aught else than laugh at the proposal as a good joke. But herein she was deceived. Isabella Day caught at the offer of John Pearson the Life Guardsman, with an eagerness and a joy beyond description; she begged of the cook to arrange a meeting; it was done; and the result was an elopement and a clandestine marriage!

The day which ended the residence of Miss Day with her parents, ended her life of luxury and ease. They renounced her for ever. Her name was erased from the family register, and she was as completely severed from those she had left behind as if she had been buried in the family vault. The rage of her mother was fearful for a time; but Isabella was beyond its reach, and happy. Her husband was a fine-looking young fellow, tall, well-made, and handsome in feature and in form. He was also kind and gentle towards her; and whatever discrepancy existed between them before marriage, none was allowed to exist afterwards; for although he could not rise to her standard of refinement and elegance, nor give her the means of gratifying those tastes which her breeding and habits had fostered within her, yet they both had sense enough to know how to adapt themselves to each other; so their life, if not a luxurious one, was one of resignation and contentment. She followed him to those places to which his regiment was occasionally ordered; and when, in a year or two, he was invalided and discharged from the army, she retired with him to his native village of Burton-in-Kendal, and thence to Workington, where he found employment in the foundry at Beerpot. Two children were born to them, both girls; the elder of whom, as I have said, was on a visit to her relatives in Dublin; while the other daughter, Isabella, narrowly escaped death from the plague, at the time of her mother's decease, as I have narrated. I now resume my story at the period when she was left an orphan.

Lady Curwen, as has been intimated, undertook the necessary and, to her, pleasant task of befriending the desolate girl. She had been kind to her mother; indeed she thought it an honour rather than otherwise to be on friendly terms with her. She was a frequent visitor at the Hall, where she was received rather as a friend and equal than as a poor woman; for although she was in straitened circumstances, she was free from that cringing dependence which poverty is calculated to engender in those who are reared therein.

Her paternal relatives in Westmoreland also interested themselves in the orphan; so the bereaved child knew neither want nor scant. In a while she went to her uncle's homestead in Burton, where for a year or two she resided and thrived again. But the sea and its surroundings had more charms for an ardent girl than the more sober associations of an inland life; she would rather scamper among the rocks and sea-weed of her native shore than ramble among the heather of her moorland home; and so, as time passed on,

she began to yearn after the earlier associations of her life. And inheriting the recklessness and determination of her parents, she, unmindful of obligation and of self-interest, carried out a long-cherished project: she ran away! While her uncle and his family were at church one Sunday morning, she went to the stable and taking thence a cart-horse with which she had become familiar, she got astride upon his back, and bidding adieu to the farm and all its belongings, she set off to the place of her birth, which she reached safe and sound, but not without having attracted considerable attention from the onlookers on the way. Taking the horse to the inn, at which her uncle happened to be known, and requesting that it might be cared for until it was called for, she bent her steps to the well-remembered homes of her old neighbours, by whom she was cordially received.

She was at this time a fine blooming girl of twelve or thirteen years of age, tall, stately, handsome, with a natural aristocratic bearing, but remarkably unsophisticated and simple. Her return, and the way in which it had been effected, soon reached the ears of her late mother's friend, Lady Curwen, by whose influence she soon secured a good place as housemaid; in which position I shall leave her while I recount a fragment of the history of her elder sister Letitia.

I have said that her family renounced for ever their runaway relative. But in course of time an elder sister of the offender, who was married to a gentleman named Weeks, and living in London, relented of her animosity by occasionally corresponding with her, and sending her now and again what enabled her to keep a few marks of her former life about her. The children, however, were not visited with the same hostility as was their mother; they were inquired about, and, through a cousin who was known to the girls as Councillor Lennon, an occasional letter of recognition was sent them. This courtesy led to Letitia being sent for to Dublin, where she resided under the care of Lord Annesley for a few years. But what is bred in the bone is certain sooner or later to make itself visible; it was so in the case of Letitia: a disposition for frolic and adventure was in her; she found it difficult to conform to the rules of life which now held her in, and in spite of all restraint and watchfulness, she went into forbidden paths, and became at last a self-made outcast from her high-bred friends. The way was this: falling in with the steward of an American ship lying in one of the docks, and taken with his charms as he with hers, she agreed to a marriage and a flight with him like those of her mother. The chief difficulty which presented itself was how to get to America with her intended husband; but where there is a will there is mostly a way; both existed in this case, and proved successful. She adopted male attire, applied for and obtained a position which had become open on board of her husband's ship, that of assistant steward or cook, in which capacity she served in company with her husband during the voyage to Charleston. There she arrived in safety; her husband left off going to sea; and the last time her sister Isabella heard of her, she was mistress of a large and flourishing inn in the above city.

Some time after Letitia's abandonment, Lord Annesley, yielding to Lady Curwen's entreaty, and

perhaps to the voice of his own conscience as well, sent for Isabella, promising to give her the education and position of a lady, provided she would in all things conform to his wishes. The offer was a good and kind one, and presented temptation sufficient to induce an enthusiastic girl to yield thereto a ready compliance. The only means which Cumbrians had of reaching Ireland at that time was by the coal-vessels which regularly sailed from Workington to Dublin. In one of these Isabella Pearson set sail with visions of grandeur and greatness before her. But the winds and waves had well-nigh extinguished the lamp of hope which was burning so bright within her, for she had not been long on her voyage before a terrific storm broke upon the deeply-laden brig; it was impossible to make progress; it was hazardous to put back, for Redness Point, where many a noble ship had been wrecked and many a precious life lost, stood threateningly behind them. At last, however, the master of the brig made for the Scotch coast, and happily succeeded in gaining the port of Kirkcudbright. Here our heroine remained with the vessel nearly a week, when the weather permitting, the voyage was again attempted, and without further mishap accomplished.

Isabella Pearson was received into the mansion of her noble relative with becoming friendliness. I have heard her, in her old age, describe his lordship as being a fine-looking venerable man, with a head white through age, an eye beaming with kindness, and a heart brimful of love. He had had the misfortune to lose a leg, and like many of his lowlier brethren, had to be content with a wooden one. With him she spent a few happy months; and at length became as familiar with the ways of those in high rank as she had been with those of her own class. I cannot say how long this new life lasted; but it is certain that as time passed she began to feel her lot irksome, and to long for the less elegant, but to her more pleasurable life she had previously led. The fact is that, as in the case of her sister and her mother, Cupid, small and child-like though he seems, was far more powerful than wealth and fashion, and all other attractions of aristocratic life. While living as a domestic servant in Cumberland, she had fallen in with a young sailor, who had run away with her heart. When she set sail for Dublin she had a hope that nothing would happen to prevent her from yielding to her wishes to become his wife; but she had not been long her relative's guest before she was forced to come to another conclusion; for she saw plainly that her worthy kinsman had set his heart upon fitting her to become something better than a common sailor's wife. A lady had been engaged as her governess and a time fixed for her arrival; but before the time came the inbred spirit of freedom had again asserted itself, and Isabella had bidden adieu for ever to Lord Annesley and all the good things which his kindness had gathered around her! A collier brig took her back to her native village, and soon after she became the wife of John Ruddock, able seaman.

No one can justify, though all may extenuate, the conduct of Isabella Pearson; nor can any one be pronounced harsh and unfeeling who may say: "The suffering that might fall to her lot in after-life was the result of her folly and recklessness.

On the other hand, it may be pleaded that her heart was her own, to give to whom she pleased; and as it had been sought for and gained by the young sailor, her happiness could only be secured by living with him; therefore she did right in preferring his lot to the wishes of her noble uncle. Be this as it may, she grievously erred in quitting him in so heartless a way after the tender care she had received at his hands. And this she afterwards acknowledged. After her marriage, her husband left the sea, and taking his young wife with him to Durham, he there found employment as a sail-maker, in which art he was proficient. A letter, professing repentance, was written to her uncle; but before it was posted the death of Lord Annesley was announced; which event put an end for ever to all hope for help or favour in that quarter. Soon after, a pressgang laid relentless hands upon poor Ruddock, and dragged him on board a ship of war; so once more our heroine was forced to seek her living in domestic servitude. But herein she was not able long to abide, for the birth of a daughter made such life for a while impracticable. Sad as was her lot, it soon became worse; for her poor husband was killed in an engagement off the coast of Spain, and with many other brave hearts found an early grave in the ocean's bed.

Isabella was now left with a young child to fight the world alone. Health and vigour, however, were her portion; and hearing that plenty of work for women was to be had at Cleator near Whitehaven, she repaired thither, and found a settlement and a living. While there, she was one day agreeably surprised by a visit from her kind friend Lady Curwen, who had driven from Workington Hall expressly to tell her that an advertisement applying for the heirs of John Pearson who worked in Beerpot Foundry, had that week appeared in the columns of a London newspaper, and urged her to attend to it. But she was illiterate, was unused to business habits, and being alone and helpless, put off the matter day by day, until at last she gave it up altogether. What might have come out of this, is of course unknown to the writer; but Isabella herself believed—I do not know why—that her aunt, Mrs Weeks, had died, and had bequeathed to her sister's children a considerable sum of money.

Time passed on, and her child grew, developing among other things a love of mischief; for one day, while her mother was at the mill where she wrought, she got to the box in which were kept her mother's cherished family documents and letters, and amused herself by setting them ablaze one by one at a lighted candle got for the purpose! Thus, in one half-hour, every document necessary to prove her mother's pedigree was destroyed, and with it all hope of bettering her position was thrown to the winds; so, when some years afterwards, Lady Curwen sent a messenger to tell her that the advertisement I have named had once more appeared in the public prints, she paid no attention to the information, satisfying herself simply with an expression of thanks to her kind benefactor!

She was, however, content with her lot. Her child was her chief comfort and joy. For her she toiled in the mill by day, and in her humble home at night; and as she grew in stature and in beauty, the mother's heart throbbed its grati-

tude and her eye beamed with admiration. But on one occasion she had nearly lost her. Playing one fine afternoon on the bank of the stream which drove the wheel belonging to the mill, her feet slipped, and she fell in. A man who happened to be a little in advance, had his eye drawn to an object on the water, which he at first took to be a quantity of loose hair; but another glance revealed to him the head of a little girl beneath the surface of the rapid stream. He ran and was just in time to lay hold of the hair as its possessor was falling over on to the wheel. Another moment, and Jane Ruddock (the drowning girl) would have been no more; in which case he who now pens these fragments of a strange history would not have been in existence—for that little girl became his mother.

I have little more to add. Isabella Pearson, who, as I have shown became Isabella Ruddock, wife of a common sailor, once more entered the matrimonial lists; but she neither improved her position nor increased her happiness by so doing. Indeed her life, while her second husband lived, was imbibed by his love of strong drink. But she survived him. She was a widow the second time when she became familiar to my youthful eye. Many a merry hour have I spent in her company. Often I have heard her relate the incidents which make up this story. She was a fine, tall, handsome woman while health remained with her; she had also a large womanly heart, a hot impetuous temper, and a remarkable simplicity and honesty of character. She died in 1849, weighed down with years and infirmities; but she ended her eventful life in much patience and peace.

A LADY'S ASCENT OF THE BREITHORN.

FANCY the following tableau. Scene—Switzerland; time—August 1875, at a desolate rocky part of the Surenen Pass. A group—Youthful grace and vigour; manly strength and endurance, &c. Fore-ground—Four heads eagerly bent over a huge bowl of *café* placed on a board, which is extended over four laps. Hands belonging to said heads lading the mixture into their mouths with large wooden ladles with little curved handles, between convulsions of mirth. Background—The chalet of the Waldnacht Alp, from which the realistic artist should cause hideous odours to ascend in the form of dense vapour. At the door of it, the unwashed and scantily clad figure of a Swiss herdsman, fearful to behold, owner of chalet, and like Caliban himself, chattering an ominous jargon, and grinning at the English feeders. Right of background—Attendant guide, cheerful and pleased that he has at last secured some sustenance for his 'leddies,' who have been walking from eight A.M. to four P.M., and will yet have to go on till three-quarters of an hour after midnight. These tableaux, with minor variations, were frequent in our tour.

After many adventures and many jokes, after being lost in a pass from eight o'clock to ten, when the sun had set, and having to wander about for those two hours on the edge of a precipice guiltless of path, being finally rescued by a heaven-sent and most unexpected peasant with a lamp—after these things and their results, which were blackened complexions, dried skins, and dilapidated costumes, we arrived at Zermatt, where we

settled down for a time. The object of the settling down was in one word—ascents.

Nothing much, according to the men, had yet been done, though we in our secret hearts hugged the proud thought that Pilatus had not defeated us, and that the Twelfth-axe-like snows of Titlis had been pressed by our tread; that the Aegischhorn, though it had witnessed (N.B. at the end of a long day) the heat and perspiration which dimmed our few remaining charms, and had heard our smothered groans, had had in the end to feel our light weight upon its summit, and to bear us as we gazed with awe at its mighty circle of peaks. But what do these avail? In the eye of man they were mere preparation for mightier things.

After some debate, mingled with faint remonstrance on our part, when Monte Rosa was mentioned, the *Breithorn* was decided upon; and the manly spirits, which had become depressed by a few days' lounge, arose. Such is the enigma Man! The day was fixed, an extra guide (one Franz Biener—known as Weisshorn Biener) engaged on the night before we went up to the Rifel. After a few hours' disturbed sleep we were awake at two; and dragging our weary and faint emaciated bodies from the beds where they had not been too comfortable, we dressed by the flickering light of a candle; and as we dressed, my friend and I cast fearful looks out at the Matterhorn, which fiercely pierced the dark sky, and seemed to say to me in the words of the poet:

Beware the pine-tree's withered branch;
Beware the awful avalanche!

As I put the last finishing touches to my collar at the glass, my feminine pulses slightly quickened to the tune of—'This was the peasant's last good-night'; and though no voice far up the height replied 'Excelsior!' yet a voice came from outside which meant in downright English very much the same thing; and my reflections were quenched in the carousal down-stairs, which I hastened to join. An unfortunate and sleepy maid was ministering to the wants of my friends in the dimly lighted salon of the Rifel-haus. Outside, the guides were impatiently stamping about in the frosty night, and complaining of the length of our delay, insinuating that the sun would soon be up. The fact is the preparations of toilet on our part were complicated. The uninitiated may not know that the feminine clothing of the present time, elegant though some may think it, is not conducive to comfort in mountain climbing. A well-tied back *tablier* has a restrictive influence upon the free movement of the lower limbs, and only admits of a step of a certain length. In rock-work it is felt to be peculiarly irksome, and in soft snow it is trying to the temper.

Let the imaginative reader then, if he be able, picture two young women devoid of *tabliers*, and so at once removed from the pale of polite society. I tremble as I write with the fear that this avowal may remove from me and my companion that feminine sympathy so dear to our hearts. But I must descend a step lower. Freedom from *tablier* was not sufficiently radical. Our skirts must be carefully pinned up round our waists à la washer-woman, so that our progress be perfectly unimpeded; and armed with masks and spectacles we sallied forth into the darkness—a party of six. I shall not easily forget the delicious exhilaration

we felt as we hastened along towards the Gornier glacier. The dark cold air touched our faces crisply, and feelingly persuaded us of the advantage of the sun's absence.

The searching sensation of being about to commit a crime, attendant on nocturnal adventures, clung to us, and we were filled with a vague remorse, in which we felt at one with Eugene Aram. At the same time the ridiculousness of our position soon wrought upon us to such a degree that we profaned that wonderful silence with unholy bursts of laughter. Our festivity ceased when we reached the glacier, for there we broke up into line, we ladies being tenderly taken possession of each by a guide, who soon got us over a rough moraine. The glacier we found unpleasantly slippery; and it was exciting work, as at the point where we crossed it was very much crevassed, and steps had often to be cut. The nails on our marvellous boots answered admirably, and we sprang about with great sure-footedness and with exquisite enjoyment.

The leader of our party was in a rather dangerous plight, for he had had no nails put into his boots, and we felt quite anxious as through the dim light we noticed his uncertain movements. How he got across with the ice in so bad a condition, is a marvel! We had been on the glacier about an hour when the light began to creep up over the mountains, and we were in the midst of a scene of wonderful beauty. The Monte Rosa, the Lyskamm, Castor and Pollux, the Breithorn, the Masthorn, and many another shrouded in their utter whiteness stood round us in awful calm, closing us in upon a lake of tossed and heaving ice. The moonlight which streamed down upon us on one side, and the pale yellow light of the dawn on the other, lit up the scene with a weirdness which seemed not of our world. We saw each other's phantom-like figures gliding about, and felt that we were too real to be there—a place where only ghosts had any right to be. The feeling that pressed upon me was that I had suddenly intruded into nature's holiest of holies. It seemed as if some secret of a higher life than this was being sighed through the air, and that I, with all my earth-stains on me, could not rise to the understanding of that secret. Yet on that early morning in August, in the same world far away, the same London was going on in the same old way we knew so well. Cats were even then stealing along suburban walls; cocks were beginning to practise their crescendos, tired-out citizens were tossing in oppressive four-posters, dreaming tantalising dreams of cool sea-breezes not for them; while round all must be clinging that heavy breathed-out air, which of itself is a very *inferno* in contrast with the mountain ether.

By the time we had reached the upper plateau of the St Théodule glacier, it was light, and we were all roped together. The process of roping in this enlightened age I feel it to be unnecessary to describe. Thus we marched along that profound and frozen solitude tied together in a long line. The snow was as hard as a road, and the cold intense. Biener is an excellent guide, but his pace is very slow, and thus we got rather beaumed. We had, however, passed the Little Matterhorn on our left, and the Théodulehorn on our right, with the little rude *cabane* erected on the rocks at its foot—more than eleven

thousand feet above the sea, and the highest habitation in Europe—and were beginning to trail our snake-like length up the snow-slopes on the west and south of the mountain, when my friend became so unmistakably ill that we came at once to a halt and a consultation. She (to her honour) much wished to go on, in spite of sickness, giddiness, faintness, and a livid complexion; but as that was out of the question, she was untied from the rope, and sent back with our ordinary guide (a first-rate fellow, one Johann von Aa) to the hut already mentioned.

When we reached the actual snow-fields of the Breithorn, I had to learn that the work of my day had scarcely begun. As the sun rose, the snow began to get very soft, and instead of going in to my knees, as I had expected, I literally waded in it up to my waist. With mighty efforts I lifted up my already wearied legs and plunged them into ever fresh pits of snow, where they frequently became so firmly imbedded that, struggle as I might, I could not move; and presented to the spectator the hapless object of half a woman masked and spectacled, striving and panting. From an æsthetic point of view I cannot say I felt myself a success; but from a moral point, I felt myself a very finger-post through the ages. Truly I had given up my all in the shape of appearance, and had offered myself up on that altar of adventure on which so many braves of my country have been sacrificed. The mode of rescue from the uncomfortable position indicated above was almost as bad as the plight itself. I feebly kicked; you can't kick boldly with your legs in tight pits; and the guide dragged at the rope which bound my waist, and then out I came like the cork out of a bottle. Two hours and a half of this sort of thing went on, varied by refreshments and occasional rests for breath-taking, but still it appeared to me that we were always at the same spot, and ever the glittering summit from afar mocked my helpless gasps. At last (ah! what an at last!) the final slope—really the final one—stretched right up before us. A party of men who were engaged in scientific experiments peered over at us; and with one last desperate effort I found myself landed amongst them at the top of the Breithorn, and thirteen thousand seven hundred feet above the sea. As we placed our feet upon the summit we groaned the groan of triumph, and gazed with awe around us upon the inexpressibly magnificent scene which spread itself out before us. A mighty circle of mountains stood in awful calm around us. Every fantastic line, every curious heaping, every wild wreck, every gleaming curve of glacier possible to mountains, seemed gathered together before us. Each peak had a proud originality of its own, which shewed through all the sameness of the uniform whiteness. But the spirit of these places is the most wonderful thing about them. The clamour, the struggle, the unrest, which make up to most of us the atmosphere of this world, seemed in these regions to have been left behind in a past state; and this in a way was illustrated by the scene itself. The contorted forms and tossed rocks spoke of struggle, gradual it may be, but still struggle. But in the serenity surrounding those unearthly peaks there was a peace which seemed to have left struggle far behind—the repose of a wide knowledge gained only through sore fight and aspiration.

A short time of peaceful dream was allowed me, and that was rather marred by the intense glare of the light, and then we began the descent. In an evil moment of rest some little way down, I left hold of my alpenstock and leaned it against my shoulder. In a moment it was gone—down, down, sliding skittishly away, till my heart was pained by its final leap into a crevasse far away. As I looked, I imagined what a crash my skull would have come at the bottom of that crevasse. Afterwards found out that the alpenstock was not my own, as I then thought, but that I had inadvertently changed with one of our guides. Imagine my grief at the thought that I had lost the dear companion of my travels, that staff which had guided my wavering feet and upheld my tottering body through passes and up mountains, and which I intended to preserve until my death! My situation without it was rather perilous, and would have been more so had not the snow been very soft. But the guide took me entirely in charge, and lent me his axe, which I was certain I should recklessly lose after the same fashion. After a weary time, Biener the guide decided to *glissade* me. I was resigned. What else could I be? By that time I was very resigned. He took off his coat, and made me sit down upon it, then tied my skirts around me. A rope was attached round my waist, one end of which was grasped by Biener in front, and the other by my gentlemen friends behind. Then ensued a process in which my limbs were nearly severed from the body, and in which I suffered greatly. Biener rushed down the slope dragging me behind him; while the gentlemen, unaccustomed to this sort of thing, and not being able to go fast enough, hung a good part of their weight on to the rope behind, and so almost bisected me. I never expected to be an individual whole again; halves were my fate. Never was creature in so miserable a plight. No Procrustean bed could have produced greater tortures than those I suffered as I sped down that miserable slope. I shouted all the French I could think of to Biener to stop him, and rid me from the hideous rope, which cut me like a knife; but the air would not carry my words, and on I skimmed and floundered. At last he heard my cries, and released me from the fetters. The fact was that the gentlemen were quite unable to keep up with Biener in the deep snow, with the dismal result, as seen above, of almost cutting through my waist. The lesson to be deduced from this is the simple maxim I commend to all my feminine readers: *Never*, under the most favourable circumstances, *glissade*.

When we reached the cabane where my friend was waiting for us, we were met by Johann, who told us with a long-face that the 'laddy' would not eat anything, and was very sick. We found, to our sorrow, that she had been in a miserable condition all day, and had suffered dreadfully from mountain sickness. She was so ill that it was impossible she could walk, and we were a long time in deciding what was to be done. Now, a helpless invalid, at a height of over eleven thousand feet above the sea, is not a being easy to legislate for. At last a litter was contrived. A chair was placed on some alpenstocks; and an American gentleman whom we met at the cabane being kind enough to lend us his porter, we found hands enough to carry her part of the

way at least, to Zermatt; the Riffel-haus, where we were staying, being out of the question, on account of the Gomer glacier and its moraines and rocks, which would have to be passed to get there. Our party, and to say, had then to separate, two of us going to Zermatt and two to the Riffel. The melancholy *chaise-a-porteur* procession wended its way to Zermatt; and with considerably damped spirits we went on to the Riffel, which we reached at about half-past six p.m. The ambulance party did not get to their destination till eight o'clock.

All that remains now to be told of this our adventure is the sad result. The next morning, on waking from sleep, I found that my ear adhered to the pillow; and when, with much trembling I approached the glass, a spectacle presented itself to me which I can never forget. As I gazed at the grotesque reflection of myself, I inwardly vowed that no mask of London make, elegantly worked as it might be, should ever cover my face again. A large flapping cover-all 'mask' of the country let me recommend to ladies who go up snow mountains. I was swollen; I was black; I was hideous! Half of the skin of one ear was hanging by a shred, and the ear itself was a blister; while all round my neck from ear to ear was a chain of blisters. Their state was so bad that the dressing of them by one of our party (a doctor) took half an hour, and I could scarcely turn my head. It required a good deal of courage to face *table-d'hôte* and the young ladies who were indulging in complexion and large portmanteaus. But I did it! Would that I could say I enjoyed it. I did not enjoy it. The complexion of the scornful and the scorn itself, embittered that meal, usually attended with such joys. In my travelling afterwards, I became accustomed to the searching glance at my poor tattered skin and to the remark: 'I see you have been doing glacier-work.' And it was not until a month of English life had to some extent repaired me that I could look back with delight and triumph to the ascent of the Breithorn.

ECCENTRIC PEOPLE.

MR TIMBS, in his book upon *English Eccentrics and Eccentricities*, introduces us to a collection of funny people, with whom it is good company to pass an hour. To get away from the dull routine of conventionality for a while is at all times a relief, more especially when we fill the interval by watching some of our eccentric fellow-creatures who are good enough to divert us by their antics. Some are serious in their folly; some are mad; some we admire, while others again awake our pity; but one and all they are gifted with a force of will that merits attention.

A collection of dead-and-gone eccentrics now pass before us, recalling a few living ones that we know of, whose collected vagaries, if published, may in turn probably amuse our grandchildren. First, let us look at Beckford, a name not much remembered now, although it belonged to a man who was a marvel in his day. Gifted with extraordinary powers of mind and will, he did everything by turns, and nothing long. He wrote a book that created a sensation. No great marvel that, to people of our day, when the difficulty is to find

some one who has not written a book; but Beckford wrote as no other author. *Father* was written at one sitting! It took him three days and two nights of hard labour, during which time he never undressed. We know of one instance somewhat similar. A reigning lady novelist told us once that she was pledged to her publisher to send him a three-volume novel by a certain date. Two days previous to the expiration of her contract, her novel had only reached the opening chapter of the third volume. On the evening of the first day she went to a ball, danced all night, returning home at the small-hours of morning, when, after taking off her ball-dress, and drinking some strong tea, she sat down to finish her task. All that day she wrote and on into the next night, never leaving her desk until she had written *finis*; when with trembling hands she despatched her manuscript in time to fulfil her engagement.

There are some natures that need the pressure of necessity, or self-imposed necessity, to goad them into action; their resolution once formed, no obstacle is suffered to come between them and its fulfilment. Beckford was one of these. He determined to build a house—the abbey at Fonthill, where he resided for twenty years—and swore by his favourite St Anthony that his Christmas-dinner should be cooked in the abbey kitchen. Christmas approached, and the kitchen was in an unfinished condition. Every exertion that money could command was brought to the task, and Christmas morning saw the kitchen finished and the cooks installed. A splendid repast was prepared, and the dinner actually cooked, when lo! and behold, as the servants were carrying in the dishes through the long passages into the dining-room, a loud noise was heard, and the kitchen fell through with a crash! But what cared Beckford? He was rich; he could afford to build his kitchen over again; meantime he had humoured his whim and kept his vow to St Anthony; and we may add, made good his title to eccentricity, for which we applaud him, and pass on to watch some others.

What sorry figure is this that comes next? A poor neglected imbecile, living in squalid lodgings at Calais. It is scarcely possible to recognise in this unhappy being the once gay and elegant Beau Brummel, the glass of fashion and mould of form to the men and women of his generation, whom he ruled with the despotism of an autocrat. Yet this is the poor Beau and no other. He is holding a phantom reception. Having desired his attendant to arrange his apartment, set out the *whist-tables*, and light the candles—alas! only *tailow*—he is ready at eight o'clock to receive the guests, which the servant, previously instructed, now announces. First comes the Duchess of Devonshire. On hearing her name the Beau leaves his chair, and with the courtliest bow, the only reminiscence of his departed glory, he advances to the door and greets the phantom Duchess with all the honour that he would have given the beautiful Georgiana. He takes her hand and leads her to a seat, saying as he does so: 'Ah, my dear Duchess,

how rejoiced I am to see you; so very amiable of you to come at this short notice. Pray bury yourself in this arm-chair. Do you know it was the gift to me of the Duchess of York, who was a very kind friend of mine; but poor thing, you know, she is no more!' At this point tears of idiocy would fall from his eyes, and he would sink into the arm-chair himself, awaiting the arrival of other guests, who, being duly announced, were similarly greeted. With these ghosts of the past he would spend the evening until ten o'clock, when the servant telling each guest that his or her carriage was waiting, would carry his poor old master off to bed. We cannot wish him good-night without the payment of a sigh for the pantomime he has acted and the sad lesson it conveys.

And now we conjure up a droll figure, whose eccentricity borders on madness, the spendthrift squire of Halston, John Mytton. He is tormented with hiccups, and tries the novel cure of setting fire to himself in order to frighten it away. Applying a candle to his garment, being sparsely clad at the time, he is soon in flames. His life is only saved by the active exertions of some people who chance to be in the way at the time. He invites some friends once, and when the company are assembled in the drawing-room, he startles them all by riding into the room on a bear! The guests are panic-stricken: one mounts on a table, another on a chair; they all strive to make their escape from the ungracious animal, and its still more savage master, who is enjoying the misery of his guests with the laugh of a madman. Let us too leave him.

Ladies have a great field for the display of eccentricity, in their mode of costume. We know of one lady who has never altered her style of dress since she was eighteen. The consequence is that every ten years or so the fashions come round to her, and for a brief period she is *à la mode*. Never having made any concessions to the abominations of crinoline or false hair, she is at the present time more orthodox than she appeared five years ago. Every time has had its eccentricities in this respect, and Mr Timbs shews us a certain Miss Banks, who died in 1818, and in plain terms looked a 'regular guy.' She was a lady of good position, being the sister of Sir Joseph Banks. Her costume consisted of a Barcelona quilted petticoat, which had a hole on each side, for the convenience of rummaging two immense pockets stuffed with books of all sizes, which did not add to the symmetry of her already large proportions. In this guise she went about, followed by a footman carrying a cane, as tall as his mistress, or her luggage when accompanying her on a journey. She was the originator of the words *Hightum*, *Tightum*, and *Scrub*, which so many ladies are fond of applying in the order of precedence to their wearing apparel. These words Miss Banks invented to distinguish three dresses she had made for herself at the same time, and all alike; the first for best, the second for occasional, and the third for daily wear.

While on feminine eccentricities we must record some that we have met with in our own day. So convinced is one elderly married lady of the pecculating propensities of all lodging-house menials, that after each meal a curious scene takes place in her room. Every article, such as her tea-caddy, sugar-basin, jam-pot, &c., which she has had occasion to use during the meal, is placed on the table,

on which stand a gum-bottle, a brush, and several long strips of paper. She then proceeds to gum up her property. A strip of paper is gummed round the opening to the tea-caddy; the pot of preserve is similarly secured, together with all else that is likely to attract that lawless fly the lodging-house servant! We know of another lady who for years has lived with only the light of gas or candle in her rooms. She imagines that air and daylight are injurious to her sight, and her rooms are little better than well-furnished tombs, into which no chink of light or breath of heaven is suffered to intrude.

Mr Timbs introduces us to a lady equally eccentric in her ideas about water. Lady Lewson of Clerkenwell objected totally to washing either her house or her person. She considered water to be the root of all malady, in the unnecessary way people expose themselves to the chills caught by frequent ablution! And as for health—was she not a living instance that a morning tub is all nonsense, for she was one hundred and sixteen years old when she died! For the greater part of her life she never dipped her face into water, using hog's-lard instead, to soften her skin. Although large and well furnished, her house, like her person, was never washed and but rarely swept.

We remember an amusing instance of French respect for cold water, in the speech of a French gentleman, married to an English lady of our acquaintance, who used to indulge in a bath morning and evening; a custom so astounding to her husband that he exclaimed in our hearing: 'She does not use water—she abuses it.'

Eccentricity often displays itself in an inordinate affection for animals and a singular manner of treating them. An instance of this was the late Earl of Bridgewater, who now comes before us with his family of performing dogs. He lived in Paris during the last century, where the circumstances we narrate took place. He was a miserable-looking little man, unable to walk without the support of two lackeys. He had an immense fortune, which he spent in gratifying every caprice. Was a book lent him? It was regarded as the representative of its owner, and returned in the earl's landan, occupying the place of honour and attended by four footmen in costly livery, who handed it to the astonished owner. His carriage was frequently to be seen filled with dogs, his special pets. On the feet of these dogs he bestowed as much attention as though they were unfortunate human beings; he ordered them boots, for which he paid as dearly as for his own. Not caring to entertain his own kind at his table, few people dined with him. Still, covers were daily laid for a dozen, served by suitable attendants. At this table he received, and dined with no less than twelve favourite dogs, who seemed to comprehend the compliment paid them, as they occupied their chairs with decorum, each with its white napkin tied round its neck. They were so trained, that should any, by an instinct of appetite, transgress any rule of good-manners, he was banished from the table, and degraded to an antechamber, where he picked his bone in mortification; his place remaining empty until he had earned his master's pardon.

There are some whose eccentricity takes the form of hatred of society. Of this number was

the Honourable Henry Cavendish, a man of great learning and enormous fortune, who earned the title of 'Woman-hating Cavendish,' as he would never see a woman if he could avoid it. If a female servant was unlucky enough to shew herself, she was instantly dismissed. He was compelled to employ a housekeeper; but all their communications were carried on by correspondence. His ideas of dining were restricted to legs of mutton only. On one occasion when his housekeeper suggested that one leg of mutton would not be sufficient for a party invited, he met the difficulty by ordering *two*!

A number of eccentricities are displayed by people in their burial bequests. A certain Dr Fidge, a physician of the old school, converted a favourite boat into a coffin, which he kept under his bed for many years in readiness. When death drew near, he begged his nurse to pull his legs straight and place him as a dead man, as it would save her trouble afterwards, saying which he comfortably departed. Job Orton, a publican of the Bell Inn, Kidderminster, had his tombstone with epitaph erected in the parish church. His coffin was also built and ready for him; but until he was ready for it he used it as a wine-bin. Major Peter Laballiere of Box Hill, Dorking, selected a spot for his burial, which he directed should be without church rites, and *head downwards*; in order that, 'as the world was in his opinion topsy-turvy, he might come right end up at last!' But a certain Jack Fuller caps even the major, for he left directions that he was to be buried in a *pyramidal* mausoleum in Brightling churchyard, Sussex; giving as his reason for selecting to be embalmed in stone *above* ground, his unwillingness to be eaten by his relatives—a process he considered inevitable if buried in the ordinary manner, for 'The worms,' he declares, 'would eat me; the ducks would eat the worms; and my relations would eat the ducks.'

Of all eccentricities, those displayed by misers are the most notable and repulsive. To dwell upon them at any length is neither pleasant nor interesting; it is only where parsimony and genius are allied that one pauses to examine the specimen. Let us now take a brief survey of Nollekens the sculptor, in whom these opposites were met. Descended from a miserly stock, he did not fall short of his ancestry in his love of money, and it first became apparent in a filthy mode of living while a student at Rome. He married a woman even more parsimonious than himself, and their housekeeping was pitiful. Hatred of light is an observable trait with most misers; and over their coals and candles the Nollekens were scrupulously economical; the former, Nollekens counted with his own hands. The candles were never lighted at the commencement of the evening; and if a knock were heard at the door, it was not answered until repeated, in case the first should prove a runaway, and the candle be wasted! A flat candlestick served them for ordinary purposes, and by carefully extinguishing them when company went, they made a pair of moulds last a whole year!

Before his marriage, Nollekens had an unfortunate little servant called Bronze, whose appetite he so feared that he placed her on board-wages, and gave her only just enough money to furnish him with food each day, which he took care to con-

sume. Bronze with rare patience, for which we cannot account, continued to serve after her master was married, and declared that never had she seen a jack-towel in their house and never had she washed with soap! Mrs Nollekens never went to any but a second-hand shop for their wearing apparel and shoes, and their charity was of the same second-hand nature, as when Mrs Nollekens directed the maid to give the 'bone with little or no meat on it' to two starving men who applied for relief. If a present of a leveret was sent them, they made it serve two dinners for four people. The sculptor grew more generous before death, his parsimonious partner having gone first, as though he strove by sundry spasmodic gifts to atone for the avarice of a life. If these details are as unsavoury to some as to ourselves, we only justify their narration on the ground stated, that the qualities they set forth were found existing in a genius.

Did time permit we should like to linger over those notable eccentrics, Porson, Horne Tooke, Peter Pindar (Dr Wolcot), and others; but we can only give a characteristic anecdote or two. Porson, the cleverest and most erratic of creatures, was the victim of abstraction to an extent that rendered him forgetful at times to eat. 'Will you not stay and dine,' asked Rogers the poet. 'Thank you; no; I dined *yesterday*!' he replied. Dr Parr asked him before a large assembly what he thought about the introduction of moral and physical evil into the world. 'Why, doctor,' said Porson, 'I think we should have done very well without them.' And it makes us laugh to hear an ignorant person, who was anxious to get into conversation with him, ask, if Captain Cook was killed in his *first* voyage. 'I believe he was,' answers Porson; 'though he did not mind it much, but immediately entered on a second!'

Tooke began life with a joke, telling every one that he was the son of a Turkey merchant; by which name he defined his father's trade of poulterer. His ready wit was never at a loss; and it is to him we are indebted for the following well-known joke. 'Now, young man,' said an uncle to him one day, giving him good advice, 'as you are settled in town I would advise you to take a wife.' 'With all my heart, sir,' replied Tooke; 'whose wife shall I take?'

Peter Pindar boasted that he was the only man that ever outwitted a publisher. Being a popular writer, his works brought him a good income. His publisher wishing to purchase the copyright and print a collected edition, made him an offer in cash. In order, however, to drive a good bargain, Pindar feigned to be in very bad health, declaring he could not live long; and every time the publisher came to see him he acted the invalid to such perfection that he got a handsome *annuity*, which, to the disgust of the publisher, he lived to enjoy until the unconscionable age of eighty-one.

We leave a number of our eccentric friends with regret. There was Curtis, whom we do not care to accompany in his search after the horrible and his passion for convicts and executions. There was Dr Fordyce, whose eccentricity in the matter of food is a study; he lived for years on one meal a day only, but a meal so enormous that we wonder, as we read the quantities, how he ever lived to repeat it daily for twenty years. We can only

now recommend those who have been interested so far, to supply our deficiencies by going to the source from whence we have gathered the matter for this brief notice.

SNAKE-INCUBATION.

THE Zoological Gardens of London, always attractive, now and then acquire even additional interest by the arrival of some new inmate, or the occurrence of some rare event among those already established there. Last year the Prince of Wales's Indian collection of animals, the year before the snake-eating snake, drew extra crowds; and of late the anaconda from Brazil has rendered herself popular by bringing forth a family of snakekings; though, owing to the effects of her long journey and close imprisonment, her young ones were dead. A few years ago the largest snake in the Gardens was an African python, that deposited above one hundred eggs in a nest of moss which had been supplied to her; and as some writers about snakes had told us that the python incubates her eggs, and that only this kind exhibits any such maternal instinct, she also drew crowds of the curious.

The pythoness whose proceedings we are about to relate, having deposited her eggs, arranged them in a level mass and then coiled herself around and over them; sometimes they could be just discovered between her coils, and sometimes she covered them entirely. Heat combined with moisture are essential to the development of snakes' eggs; and in the choice of a spot in which to deposit them, the maternal instinct of the animal in a state of freedom is evident. It is generally among decaying vegetation where heat is generated, or in some moist soft herbage where the sun's rays can penetrate. To regulate the temperature in a close cage and keep the moss precisely in a condition to suit snake requirements, was by no means easy, and our pythoness seemed far from satisfied. The fact, however, was established beyond doubt, that she was hatching her eggs by the warmth of her own body.

But a most untoward disaster happened one night in the overflowing of the tank among her eggs, completely saturating them; and it was not surprising therefore, that no young pythons appeared. The enormous reptile remained coiled around and over her addled eggs for above seven weeks, after which they were taken from her. She had, and with good reason, been exceedingly irritable and even savage during this time of trial, as it was mid-winter, the season when under other circumstances she, like her companions, would have been half torpid. But her maternal affection was undeniable, and this alone was worth witnessing; since some authors would have had us believe that snakes (and particularly non-venomous ones) manifest entire indifference regarding their eggs and young. The python's eggs being, as usual, in one long string, the keeper had no little trouble in getting them from under her.

Being aquatic in their habits, and on that account requiring much water, anacondas are difficult to keep in captivity. The one lately arrived among us was no sooner released from its travelling box than it took to the tank with which its cage is furnished, and remained in it

for hours and even days together. But not there, poor thing, can its swimming powers be displayed, since in close coils it completely fills it. Notwithstanding these drawbacks of London life, the Gardens can now boast of three of these valuable snakes; one of which has been a resident since 1869; while those in Paris have not survived any length of time.

One still more remarkable characteristic of the anaconda is that, like the sea-snakes (*Hydrophis*), but unlike the python, it produces its young alive. We have long been accustomed to think that only vipers produce live young—and hence their name—and that all the non-venomous snakes lay eggs. But snakes, so far as those in captivity are concerned, are continually doing what is not expected of them. Zoological Gardens afford valuable opportunities to students for acquiring knowledge of the form, size, habits, &c. of animals, and an occasional insight into their modes of life unattainable otherwise. This is especially the case regarding the Ophidians; creatures which in their native haunts are so retiring, inaccessible, and mostly nocturnal, that less has been known of them than of almost any other tribe of creatures. Regarding the subject in question, several very important zoological facts have recently been established at the Gardens, and we may add, to the surprise of the naturalist world in England. In 1862 (the same year in which the pythones laid her hundred eggs), the then but slightly known non-venomous English snake *Coronella levis* gave birth to a family of six live young ones in a cage in London; and several other harmless snakes in the London opidarium have also afforded cause for surprise, not only in producing live young, but in manifesting a very decided care for them. Some New-world species have been examples of this; as, for instance, the 'garter-snake,' the 'chicken-snake,' and the 'yellow boa' of Jamaica (*Chilobothrus inornatus*), the latter on several occasions, and sometimes depositing eggs at the same time, but the eggs proving bad.

Mr. Philip Henry Gosse, when in Jamaica nearly thirty years ago, gave much careful attention to the habits of this 'yellow boa'; a snake which sometimes attains eight or ten feet in length and is extremely active. He records a great deal of highly interesting matter concerning the *chilobothrus*; and, as a careful and conscientious observer, his testimony is of much value. That this snake when at liberty lays eggs, was well known, nests with eggs in them being often found. In one case a 'yellow boa' was seen issuing from a narrow passage in a bank, which when dug into was found to lead to a cavity lined with leaves and soft trash, and containing eggs. This hole had been excavated, because the dry crumbled earth was discharged at the entrance, where it lay in a heap. The passage was only just large enough to admit the snake, and the soft rubbish within must have been carried there. We cannot positively assert that the snake constructed this skilful hiding-place for herself, but if she did, she must have forced out the earth as the burrowing snakes do, or by the muscular undulations of her body; and she must have conveyed the leaves there in her mouth. Snakes do, we know, sometimes make nests by coiling themselves round and round to form a hollow. Under either circumstance maternal

instinct is undeniable; and if *chilobothrus* merely discovered and appropriated the nest of some other creature, her intelligence is still worth recording.

We knew an instance where a make in captivity exhibited restlessness and uneasiness, crawling about the cage as if in search of something. Those who had the care of it suspected she was with eggs, and placed some sand in the cage. This appeared to satisfy her, and the eggs were deposited. Mr Gosse had a Jamaica boa in the same condition. For a long time it manifested discomfort and restlessness, being savage and in every way objectionable, till at length it produced a family of young ones. Knowing it was the habit of this snake to incubate its eggs, Mr Gosse was greatly surprised at the event; and the startling question occurred to him, that when circumstances are unfavourable for the deposition of eggs, could a snake retain them until the young are hatched?

Mr Gosse's surmises have been entirely confirmed both by similar occurrences at the Zoological Gardens and by other writers, who in the subsequent interval have also given careful attention to the habits of Ophidians, and have produced valuable scientific works on the subject. It is now an ascertained fact that *chilobothrus* only but several other oviparous species may at pleasure be rendered viviparous by retarding the deposition of their eggs when circumstances are unfavourable for them! In fact we find that we must almost discard those old distinctions of *oviparus*, *viviparus*, and *ovoviviparus*; which German authors tell us are not founded on any other ground than a greater or less development of the fetus in the egg at the time of laying; or on the nature of the exterior covering of the egg; which is thicker and leathery in those which take some time in hatching, and slighter and membranous in those which are hatched either before or on deposition.

In serpents the eggs differ from those of birds by undergoing a sort of incubation from the very first, so that whenever examined, the embryo more or less advanced will be found. In the case of the pythones of 1862, an egg was examined on the fifteenth day of incubation, and found to contain a living embryo; a noteworthy fact, as the python incubates for fifty-six days before hatching her eggs. Observations with the eggs of *chilobothrus* are attended by the same results—namely the fetus in a certain stage of development is discovered whenever a gravid snake is killed and examined. The young ones of the boa in the London collection were perfectly developed and active, climbing all over their cage as soon as they saw daylight. One family consisted of thirty-three; another of eight; and another of fourteen. The activity and daring of the snakes' young were amazing, affording ample proof of their perfect development. They were always on the defensive, shewing fight on the slightest molestation. When the keeper put his hand into the nest among them they seized upon it and held on so tightly with their teeth, that on raising his hand they hung to it, wriggling and undulating like a waving golden tassel. I ventured to take up one of these aggressive little reptiles, but could scarcely hold it, from its energetic wriggling and contortions. It constricted my fingers tightly enough to prove its singular instincts, and bit me savagely with its sharp little teeth; but my glove being on,

I permitted this, glad of so good an opportunity for making personal observations.

It was said of the python that notwithstanding her care and vigilance so long as she was incubating, when her snakelings were born she took no notice of them. This may not always be the case. Vipers we know are extremely watchful over their young; other snakes are often seen accompanied by a young brood; and in the Jamaica boa maternal affection is exhibited in no slight degree. A lady visiting the Gardens compassionated one of these young families on the gravelly floor of their cage, and brought a quantity of cotton wool, which was placed in one corner. She was rewarded by seeing the luxury fully appreciated, mother and little ones all huddling into it immediately.

That these non-venomous snakes thus produce their young under abnormal conditions is further confirmed by the varying size and appearance of the offspring, and by their being more or less enveloped in the shell-covering. Some are born quite coiled in the ruptured shell, others with portions of it clinging about them, and others again entirely free. Sometimes they are, as it were, imbedded in the coriaceous covering. This was conspicuously the case with the anaconda's progeny, but her young ones had every appearance of having been a long while dead. The first of the six was freer from the shell than the others, and about a foot and a half in length.

Snake-life is altogether marvellous. The power which some snake mothers possess of retarding the deposition of their eggs, and we have reason to believe, sometimes even the young when circumstances are unpropitious for her to produce them, seems to us specially curious. *Chilobothrus* is known to have had both eggs and a living brood. So has *Coronella leavis*. Of the latter, some German ophiologists state that it is 'always viviparous'; others 'occasionally' so. In her native Hampshire woods she has been seen with a young brood about her; but there seems no satisfactory evidence of any eggs having been found. Time and careful notings only can substantiate this and many other singular facts regarding these 'wise' and 'subtle' creatures, hitherto surrounded by prejudice and but little studied. We, not well versed in Ophidian biographies, might have expected the anaconda to lay eggs because her cousin the pythoness did so; and we might have also speculated upon her incubating them, as the python did. But she has produced a perfectly developed though dead family of six, instead; a circumstance of so much interest to naturalists, that the loss of the young ones is to be regretted though not wondered at. Captured from her native lagoons, and shut out from the light of day in a box just large enough to contain her, this 'good swimmer' arrives alive; thus proving her amazing powers of endurance; but she has had no fitting place in which to deposit her young, and they died unborn. Still it is a noteworthy fact in the annals of zoology. At first, from the result of observation, the incubation of the python was 'suspected'; then it became confirmed; and the birth of young coronellas also. From this it is evident that we cease to declare that only vipers produce live young; or, according to the original signification of the word, a boa, a coronella, and several other non-venomous snakes would be 'vipers!'

Again, it is remarkable that these peculiarities of reproduction are not confined to particular families and genera; because some coronellas lay eggs, some incubate them, and others bring forth a live brood. So also, while some of the *Boaida* lay eggs, the anaconda is completely viviparous.

We would venture to urge upon those lovers of nature who dwell 'remote from towns' the value of careful observation and a noting down of what appears unusual, even of the habits of the much persecuted snake. c. h.

PLAYTIME AT OXFORD.

'WHAT is to be done this afternoon?' is a question invariably asked by scores of undergraduates, either at the well-supplied breakfast-table (for whatever men do not learn at Oxford, they at least learn to eat a good breakfast), or by those victims of procrastination who leave everything to the last moment, just as the scout is bringing up the more modest luncheon.

There are certain rules at the university—social rules I mean—which, though unwritten, are not to be broken save under severe penalties, such as being entered among that class of undergraduates yecept 'smugs.' Of these unwritten laws, one of the best and most universal enacts, that a great part of the afternoon shall be spent outside the college, presumably in active and healthy exercise, even if it be but a sharp constitutional. Not that this is a hardship, or that the answers to the question, 'What's to be done?' and the modes of spending these two or three hours, are monotonous or circumscribed. Far from it. Many places may be more full of life and amusement than Oxford in the morning and evening; but few, I am sure, can surpass the bill of amusement which Alma Mater presents to us after lunch.

Every taste can find appropriate satisfaction, save perhaps the taste for picturesque scenery, in which the neighbourhood of Oxford, to use a 'varsity term, 'does not come out strong.' Still, if I may believe report (never believe an undergraduate when he tells you a tale of a fellow he knew), Cambridge is rather worse off. We have Shotover and Bagley Wood to set against their Gog Magog Hills. Be that as it may, simple walking does not find many advocates, except on Sunday, or as a stop-gap on some off-day when rackets and the river begin to pall, as every amusement seems to do by the end of term. I have even heard a member of an eight-oar say after six weeks' daily attendance at the river, that 'he really felt he'd had almost enough of it.' And it is rather an objection to rowing, that as soon as your blisters have hardened and you feel indifferent about the cushion on your chair, the act of pulling your own weight and a trifle over begins to have a certain sameness.

To return to walking. Much of that otherwise tame exercise is involved in going to witness sports of various kinds. Almost every day in winter there is either a football match or a racket match, or the trial eights or some college sports to be inspected; or we may look in at the fives-courts or at the gymnasium, and see Tompkins vaulting the high-horse, which he does not do so well as at lunch; or to the dog-fancier's in — Street, and look over Jenken's bull-pup. Not that there is

any rattling going on of course, or such a thing as a badger in the county; but these are lazy ways of getting through the time, and except occasionally, none of our party is reduced to them. No; for Brown votes for rackets: a game active enough, I can vouch. It looks so easy to hit the ball with the great battledore-shaped racket—until you try: perhaps as easy as battledore and shuttlecock, now ousted by lawn-tennis. So just descend into the black-lined arena, and you will discover that the small sphere you aim at finds out all sorts of impossible angles, and dodges you in a way that no fellow can stand; so that rackets is rather dispiriting to a beginner. Having only once got up the ball in the course of an hour, and having sharply struck myself on the side of the head with my own racket, to say nothing of the curious attraction of the ball to my shoulder-blades, I determined that that should be my last as well as first visit to a racket court, charming as the game doubtless is when well played. So Brown will not ask me to make up his four for Holywell. There are also one or two tennis courts in Oxford; but I do not think that the favourite game of the Merry Monarch is very generally played except on grass.

I shall not part from Brown yet, but shall accompany him to Holywell and get a hand in the five-court. It is a hot game, but not a graceful one, like rackets. It is all very well to poise your racket overhead, sway backwards and send the whizzing ball against the wall. But it is quite another thing to flounder after it with outstretched hands, which seem monstrous in their hot clumsy gloves, and missing it by a hair's-breadth, 'vainly beat the air.' Say what you like against it, there is no better exercise, though I should not think of bringing a certain young lady to witness my performances there, any more than I should of asking her to come to hear me viva-voce'd in the schools.

But I have wandered from the subject to the fair sex. To return to Jones, who is going to scull as far as Sandford in the fairy outrigger in which he is proud to disport himself. With some reason too, for the equal dip of the sculls in an outrigger skiff is hard to attain, and the art of turning those craft in any reasonable space is known only to a few of the initiated. I have always found that when I steered 'by the bank,'

E'en for a calm unfit,

I'd steer too near the sands to boast my wit,

as Dryden says; though I am not quite sure that he exactly means that. Others of our luncheon-party are bound by college patriotism to go down to the barges and undergo their day's training for the Torpids. These are of the stalwart sort; but they will not have a very pleasant time of it, nor will Jones in his skiff, for the wind is rather strong, and the water even on the lower river must be pretty rough; so two of our company, not of the stalwart kind, are going to the Freshman's river to engage one of those sailing-vessels called at Oxford a 'centre-board.' The wind is blowing fairly up stream; but they will have some trouble at a certain corner called 'Blackjack;' and I shall not be surprised if their new channels are somewhat shrunken by to-morrow. Still they can swim; and if they can't, they ought to.

Besides the Rugby votaries of football, the Association and other clubs play in the parks. The

practice of the former is the most interesting to watch; and though this pastime is, not without some reason, deemed by many to be silly and even barbarous, it seems to be generally largely patronised by spectators.

We must not neglect the new running ground with its comfortable pavilion, where, if we do not wish to take a trot ourselves, we may read *The Field*, and watch through the window the training of the crack whose performances it records. And talking of running, there is or was a Hare and Hounds Club, which numbered some distinguished runners among its members; and one college at least had lately, and perhaps still has, a pack of beagles. If a man be of very solitary habits and much inclined to hide him from his kind, there is jack-fishing in many parts of the river, engaged in which contemplative recreation he may moralise to his heart's content. There is a Gun-club too; to say nothing of the hunters, hacks, and pony-carts which may be obtained for a consideration. I don't know whether the hunters are screws, for I've never tried one, and for the same reason I don't know whether they are dear or cheap; on the whole, however, I should be inclined to say *not* cheap. Then there is a bicycling club, whose members perform immense distances in wonderful times, and who talk of going to Aylesbury or to Banbury and back, as outsiders do of Cowley and Oddesden. And if you are one of the country's defenders, are there not drills in St John's Gardens, or parades in the Broad, and evolutions of all kinds in the parks? harder work than the road-making lately fashionable at Hinksey, near which, I believe, are the rifle butts. Playing at labourers has gone out, I believe.

But the summer term is the term for fun. Woful is the man who is in the schools in the bright days of June, when the sun at length gets through the Oxford fogs. The summer term is, technically speaking, two terms, for there are four terms in the 'varsity year, though no 'varsity man ever yet knew the distinctive names of them; and so the summer terms are twice as jolly as the other two, though only equal to one in length. Ah me! I shall soon have cause to sigh for the days that are no more. Then cricket and lawn-tennis, the eight-oar races, the lazy punt and nimble canoe, cider-cup and skittles at Godstow, bathing at Parsons, archery and croquet, and cousins and sisters, and the occasional flower-show, will recur amongst the standing-orders of the past!

Every afternoon, when it is fine, the cricket-grounds, most of which are at Cowley, present a lively scene. The practising nets are occupied by batsmen, the sound of whose strokes on the much-enduring leather is like the tap, tap, tapping at the hollow beech-tree, or at the garden-gate, according to the taste of the listener. If you go in front of the nets, keep your eyes and ears open, or you may get knocked down by a stray ball—a danger kept constantly in your mind by frequent cries of 'Head!' which cause many to anticipate the bump in store for one. A man does not look to advantage at the moment when he becomes conscious of a descending cricket-ball in close proximity to the back of his head. In the centre of the ground a college match is being played; and in the tiny structure often graced by the title of

Pavilion much beer is being consumed. At the further end, a couple of games of lawn-tennis are being briskly kept up. Altogether, the college ground is not a bad place in which to spend the afternoon, even though you may not be at cricket.

As to the river, every visitor to Oxford in the summer term has seen that, and its varied and variegated load of eight-oars, four-oars, dingies, whiffs, skiffs, cockle-shells, pairs, punts, and coal-barges. For my own part I prefer the Cherwell and the cushioned punt. It is not a bad plan to get on shore in the Botanical Gardens, and stroll up the High as far as Cooper's, wherein to consume strawberry ices. I do not much affect the archery and croquet, nor yet the flower-shows; very good in their way, I daresay, but you can enjoy them at home, where a racket court, or even a skiff, is not always handy, and where skittles are apt to be voted low, and the secrets of cider-cup hidden from the butler's ken. So make your hay while the sun shines. And almost as fast as the skittles fall before the practised hurler, fly the nine weeks of the summer term, which comes to most men but three times in their lives; and if enjoyed again, must be so generally only at the expense of a disastrous 'plough,' a catastrophe which necessitates extra reading and perhaps a change of residence.

So the curtain falls upon the glories of the final tableau, the Commemoration, a tableau which has sadly wanted its proper amount of blue-fire lately. Even the Long Walk is beginning to fail as an avenue, and there are some gaps in the foliage, I think. All work and no play makes Jack a dull boy: but even though he *does* work, and 'reads' when he ought, Jack need not be dull withal at dear old Oxford.

THE MONTH: SCIENCE AND ARTS.

WHILE the President of the Royal Society is travelling in America, studying in company with Professor Asa Gray, the peculiar vegetation at the foot of the Rocky Mountains—while Dr Tyndall is solacing himself with a quiet holiday in his own house on the Bel Alp—while spectroscopists are rejoicing in the new 'grating' constructed by Professor Rutherford, which multiplies to an extraordinary degree their power of observation—while physicists and naturalists are betaking themselves to inland villages or to remote bays on the sea—while amateurs are looking at the one hundred and seven photographs of the Arctic expedition recently published by the Admiralty—while artists, engravers, and printers are at work on the voyage of the *Challenger*—while readers are acquainting themselves with Mr Darwin's new book, *The Different Forms of Flowers on Plants of the same Species*—while the British Association are reckoning up the profit and loss of their meeting at Plymouth—while the promoters of the Ordnance Survey of Palestine are appealing for funds to finish their work—while geographers and adventurers are soliciting means for the exploration of Africa—while Europe is trying to prevent immigration of the Colorado beetle—while Mr Varley is attempting by telephone to carry music from Her Majesty's Theatre to the 'other side of the water'—while

the Treasury are considering whether they will ask parliament to vote three million pounds for the building of the much wanted new public offices—while Mr Berthollet is pointing out 'the possibility of producing temperatures really approaching three thousand degrees'—while Mr Rarchaert is shewing that his locomotive, combining the two essentials of adherence and flexibility, will travel safely round curves of two hundred and fifty metres radius—while Mr Cornet, chief engineer of mines in Belgium, is endeavouring to prove that compressed air can be used in mines; and while the Social Science Council are settling their programme for amendment of law, repression of crime, promotion of education, improvement of health, furtherance of economy and trade, and diffusion of art—while all this is going on, science, art, and philosophy progress in a way that implies force within as well as without.

Where steam is employed, especially on board ship, it not unfrequently happens that a sudden occasion arises for exercise of the utmost power of the engines, and that to this gain extreme power for the short time required is of more importance than economy of coal. The method hitherto adopted to effect this object is to drive more air through the fire, or to throw a jet of steam into the chimney.

Mr Bertin, a French marine engineer, has proved that the best method is to throw jets of slightly compressed air into the base of the chimney by means of a centrifugal ventilator, or at higher pressure by employing a blowing-machine working with a piston. Under the transitory action of these jets of air the combustion in the furnace is doubled, and the ship, like a warrior in extremity, may make efforts impossible in ordinary circumstances. The increase in the consumption of coal is not more than twenty per cent.; and the method having been tried on board one of the national frigates, *La Résolue*, has proved so effectual, that its adoption is only a question of time. Mr Bertin has described his method and the principles on which it is based in a paper to be published in the *Bulletin* of the Société d'Encouragement pour l'Industrie Nationale.

The same Society have just recognised the merits of an English chemist, Mr Walter Weldon, by conferring on him their Lavoisier medal—*grande médaille d'honneur*—for his discoveries and improvements in the art of manufacturing chlorine. Formerly all the manganese used in the process was wasted, and manganese became scarcer and dearer. Waste is an opprobrium in chemical operations. Mr Weldon shewed a way by which the manganese could be reoxydised over and over again indefinitely; and at once an offensive part of the process was got rid of, and the price of chlorine fell thirty per cent. This of course cheapened all the articles, and they are numerous, in the production of which chlorine plays a part; and Mr Weldon's method has been adopted wherever chemicals are manufactured on a great scale. Mr Lamy, who drew up the statement of the grounds on which the medal was awarded, said: 'If we have not the good fortune to designate a Frenchman for your suffrages, at least we have the satisfaction to present an inventor belonging to a friendly nation, the first among all for the development and the potency of its chemical industry.'

If this be true, there is a chance for another ingenious chemist for the Council General of

Guadeloupe offer a reward of one hundred thousand francs to the inventor of a new method of extracting the juice of the sugar-cane, or of manufacturing sugar.

Hitherto it has been thought that to produce a good black dye the co-operation of a metallic substance, or of a chlorate, or both combined, was indispensable. The question arose: Were those ingredients really indispensable? Mr Rosenstiehl first shewed that the metal might be dispensed with, and recently, as may be seen in the *Annales de Chimie et de Physique*, Mr Coquillion has proved that the chlorate is not required, for in the one case as in the other, the use of 'nascent' or active oxygen will effect the desired object. We are informed that the fact observed by the French chemist 'is an elegant demonstration of the action of active oxygen upon aniline salts; that it may perhaps enable us to obtain blacks derived from aniline in a state of greater purity, and to hasten the moment when we shall know their elementary composition; a question which, in view of its great interest, has been proposed for a prize by the Industrial Society of Mulhausen.'

Mr Cornet, whose name has been mentioned above, in a mathematical discussion of the question, says that compressed air would be largely used in mining operations 'were it possible to keep the temperature of the air from rising during compression much above that of the atmosphere, and from falling during expansion to the temperature of freezing water.' And he thinks that he has found 'the means for attaining this end in the use of water-spray, which could be introduced into the cylinder of the compressor, and into that of the machine using the air in the mine.' The practical details are not yet made known; but if they succeed, 'the use of compressed air in mines will soon become general, and the problem of mining at any depth will be solved.'

One part of the method devised by Mr Cornet had been previously thought of; for in 1875 an air-compressor was working in the St Gothard tunnel, of which it was said: 'The heat produced by compression is reduced by the circulation of cold water in the walls of the cylinder, in the interior of the piston and its rod; and an injection of water-spray at the two extremities of the cylinder completes the cooling.' When the compressors were at work they supplied to the tunnel fifteen cubic metres of air per minute.

When messages were first sent by telegraph, many persons were exceedingly puzzled to understand how they were sent; and now the telephone has come to disturb them with another puzzle. But scientific men have long known that 'galvanic music,' as it is called, was discovered forty years ago, that an electro-magnet on being suddenly magnetised or demagnetised gives out audible sounds, and that many notices of the curious fact were printed in English and foreign journals. Professor Graham Bell, whose experiments have been already mentioned in these pages (*ante* 203, 415), succeeded in making the sounds, which were commonly very faint, audible to a large number of persons. This was accomplished, as he explains, 'by interposing a tense membrane between the electro-magnet and its armature. The armature in this case consisted of a piece of clock-spring glued to the membrane. This form of apparatus,' he continues, 'I have found invaluable in all my

experiments. The instrument was connected with a parlour organ, the reeds of which were so arranged as to open and close the circuit during their vibration. When the organ was played, the music was loudly reproduced by the telephonic receiver in a distant room. When chords were played upon the organ, the various notes composing the chords were emitted simultaneously by the armature of the receiver.'

'The simultaneous production of musical notes of different pitch by the electric current,' continues Professor Bell, 'was foreseen by me as early as 1870, and demonstrated during the year 1873. Elisha Gray of Chicago, and Paul La Cour of Copenhagen, lay claim to the same discovery. The fact that sounds of different pitch can be simultaneously produced upon any part of a telegraphic circuit is of great practical importance; for the duration of a musical note can be made to signify the dot or dash of the Morse alphabet; and thus a number of telegraphic messages may be sent simultaneously over the same wire without confusion, by making signals of a definite pitch for each message.'

By instalments of news from the Pacific we hear of the tremendous earthquake that occurred last May; but for precise details we shall have to wait until reports are published in the scientific journals of the United States. Meanwhile, we learn that the great volcano of Kilauea in Hawaii began to be restless on the first of the month; a few days later huge columns of lava were thrown up, vehement jets of steam burst forth from a long range of fissures, and all the startling phenomena of a mighty eruption, including drifts of Pele's hair, were observed. This evidence of disturbance deep down in the earth was corroborated by an earthquake, which about half-past eight on the evening of the 9th terrified and devastated the coast of Peru, and occasioned greater ruin than the similar calamity in 1868. Iquique is said to be completely destroyed, and other towns and cities along two hundred miles of coast suffered more or less severely. As usual, the commotion of the land produced a commotion of the water, and the sea rolling great waves upon the shore, intensified the havoc. The waves varied in height from ten to sixty feet; and we are told that 'four miles of the embankment of the railway were swept away; and that 'locomotives, cars, and rails were hurled about by the sea like so many playthings.'

Also, as is usual in such catastrophes, the earthquake wave was propagated; and between four and five of the morning of the 10th, it (that is the sea) rushed upon the Hawaiian Islands in waves varying from three to thirty-six feet in height. Thus in eight hours the resistless oscillation had traversed the five thousand miles which separate the islands from the South American continent.

From this brief sketch it is obvious that there is much in this calamitous visitation to interest the physicist and geologist as well as the philanthropist. Information will in all probability be communicated from other places until the remotest points at which the disturbance was felt shall have been ascertained.

As relating to this subject we remark that the hair of Pele—a Hawaiian goddess—above mentioned can be produced artificially in a blast furnace. It has been described in former pages of this *Journal* as 'slag cotton.'

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THE MONTH:

SCIENCE AND ARTS.

WHILE the President of the Royal Society is travelling in America, studying, in company with Professor Asa Gray, the peculiar vegetation at the foot of the Rocky Mountains—while Dr Tyndall is solacing himself with a quiet holiday in his own house on the Bel Alp—while spectroscopists are rejoicing in the new 'grating' constructed by Professor Rutherford, which multiplies to an extraordinary degree their power of observation—while physicists and naturalists are betaking themselves to inland villages or to remote bays on the sea—while amateurs are looking at the one hundred and seven photographs of the Arctic expedition recently published by the Admiralty—while artists, engravers, and printers are at work on the voyage of the *Challenger*—while readers are acquainting themselves with Mr Darwin's new book, *The Different Forms of Flowers on Plants of the same Species*—while the British Association are reckoning up the profit and loss of their meeting at Plymouth—while the promoters of the Ordnance Survey of Palestine are appealing for funds to finish their work—while geographers and adventurers are soliciting means for the exploration of Africa—while Europe is trying to prevent immigration of the Colorado beetle—while Mr Varley is attempting by telephone to carry music from Her Majesty's Theatre to the 'other side of the water'—while

the Treasury are considering whether they will ask parliament to vote three million pounds for the building of the much wanted new public offices—while Mr Berthollet is pointing out 'the possibility of producing temperatures really approaching three thousand degrees'—while Mr Rarchaert is shewing that his locomotive, combining the two essentials of adherence and flexibility, will travel safely round curves of two hundred and fifty metres radius—while Mr Cornet, chief engineer of mines in Belgium, is endeavouring to prove that compressed air can be used in mines; and while the Social Science Council are settling their programme for amendment of law, repression of crime, promotion of education, improvement of health, furtherance of economy and trade, and diffusion of art—while all this is going on, science, art, and philosophy progress in a way that implies force within as well as without.

Where steam is employed, especially on board ship, it not unfrequently happens that a sudden occasion arises for exercise of the utmost power of the engines, and that to this gain extreme power for the short time required is of more importance than economy of coal. The method hitherto adopted to effect this object is to drive more air through the fire, or to throw a jet of steam into the chimney.

Mr Bertin, a French marine engineer, has proved that the best method is to throw jets of slightly compressed air into the base of the chimney by means of a centrifugal ventilator, or at higher pressure by employing a blowing-machine working with a piston. Under the transitory action of these jets of air the combustion in the furnace is doubled, and the ship, like a warrior in extremity, may make efforts impossible in ordinary circumstances. The increase in the consumption of coal is not more than twenty per cent.; and the method having been tried on board one of the national frigates, *La Résolue*, has proved so effectual, that its adoption is only a question of time. Mr Bertin has described his method and the principles on which it is based in a paper to be published in the *Bulletin* of the Société d'Encouragement pour l'Industrie Nationale.

The same Society have just recognised the merits of an English chemist, Mr Walter Weldon, by conferring on him their Lavoisier medal—*grande médaille d'honneur*—for his discoveries and improvements in the art of manufacturing chlorine. Formerly all the manganese used in the process was wasted, and manganese became scarcer and dearer. Waste is an opprobrium in chemical operations. Mr Weldon shewed a way by which the manganese could be reoxidised over and over again indefinitely; and at once an offensive part of the process was got rid of, and the price of chlorine fell thirty per cent. This of course cheapened all the articles, and they are numerous, in the production of which chlorine plays a part; and Mr Weldon's method has been adopted wherever chemicals are manufactured on a great scale. Mr Lamy, who drew up the statement of the grounds on which the medal was awarded, said: 'If we have not the good fortune to designate a Frenchman for your suffrages, at least we have the satisfaction to present an inventor belonging to a friendly nation, the first among all for the development and the potency of its chemical industry.'

If this be true, there is a chance for another ingenious chemist for the Council General of

Guadeloupe offer a reward of one hundred thousand francs to the inventor of a new method of extracting the juice of the sugar-cane, or of manufacturing sugar.

Hitherto it has been thought that to produce a good black dye the co-operation of a metallic substance or of a chlorate, or both combined, was indispensable. The question arose: Were those ingredients really indispensable? Mr Rosenstiehl first showed that the metal might be dispensed with, and recently, as may be seen in the *Annales de Chimie et de Physique*, Mr Coquillion has proved that the chlorate is not required, for in the one case as in the other, the use of 'nascent' or active oxygen will effect the desired object. We are informed that the fact observed by the French chemist 'is an elegant demonstration of the action of active oxygen upon aniline salts; that it will perhaps enable us to obtain blacks derived from aniline in a state of greater purity, and to hasten the moment when we shall know their elementary composition; a question which, in view of its great interest, has been proposed for a prize by the Industrial Society of Mulhausen.'

Mr Cornet, whose name has been mentioned above, in a mathematical discussion of the question, says that compressed air would be largely used in mining operations 'were it possible to keep the temperature of the air from rising during compression much above that of the atmosphere, and from falling during expansion to the temperature of freezing water.' And he thinks that he has found 'the means for attaining this end in the use of water-spray, which could be introduced into the cylinder of the compressor, and into that of the machine using the air in the mine.' The practical details are not yet made known; but if they succeed, 'the use of compressed air in mines will soon become general, and the problem of mining at any depth will be solved.'

One part of the method devised by Mr Cornet had been previously thought of; for in 1875 an air-compressor was working in the St Gothard tunnel, of which it was said: 'The heat produced by compression is reduced by the circulation of cold water in the walls of the cylinder, in the interior of the piston and its rod; and an injection of water-spray at the two extremities of the cylinder completes the cooling.' When the compressors were at work they supplied to the tunnel fifteen cubic metres of air per minute.

When messages were first sent by telegraph, many persons were exceedingly puzzled to understand how they were sent; and now the telephone has come to disturb them with another puzzle. But scientific men have long known that 'galvanic music,' as it is called, was discovered forty years ago, that an electro-magnet on being suddenly magnetised or demagnetised gives out audible sounds, and that many notices of the curious fact were printed in English and foreign journals. Professor Graham Bell, whose experiments have been already mentioned in these pages (*ante* 298, 415), succeeded in making the sounds, which were commonly very faint, audible to a large number of persons. This was accomplished, as he explains, 'by interposing a tense membrane between the electro-magnet and its armature. The armature in this case consisted of a piece of clock-spring glued to the membrane. This form of apparatus,' he continues, 'I have found invaluable in all my

experiments. The instrument was connected with a parlour organ, the reeds of which were so arranged as to open and close the circuit during their vibration. When the organ was played, the music was loudly reproduced by the telephonic receiver in a distant room. When chords were played upon the organ, the various notes composing the chords were emitted simultaneously by the armature of the receiver.'

'The simultaneous production of musical notes of different pitch by the electric current,' continues Professor Bell, 'was foreseen by me as early as 1870, and demonstrated during the year 1873. Elisha Gray of Chicago, and Paul La Cour of Copenhagen, lay claim to the same discovery. The fact that sounds of different pitch can be simultaneously produced upon any part of a telegraphic circuit is of great practical importance for the duration of a musical note can be made to signify the dot or dash of the Morse alphabet; and thus a number of telegraphic messages may be sent simultaneously over the same wire without confusion, by making signals of a definite pitch for each message.'

By instalments of news from the Pacific we hear of the tremendous earthquake that occurred last May; but for precise details we shall have to wait until reports are published in the scientific journals of the United States. Meanwhile, we learn that the great volcano of Kilian in Hawaii began to be restless on the first of the month; a few days later huge columns of lava were thrown up, vehement jets of steam burst forth from a long range of fissures, and all the startling phenomena of a mighty eruption, including drifts of Pele's hair, were observed. This evidence of disturbance deep down in the earth was corroborated by an earthquake, which about half-past eight on the evening of the 9th terrified and devastated the coast of Peru, and occasioned greater ruin than the similar calamity in 1868. Iquique is said to be completely destroyed, and other towns and cities along two hundred miles of coast suffered more or less severely. As usual, the commotion of the land produced a commotion of the water, and the sea rolling great waves upon the shore, intensified the havoc. The waves varied in height from ten to sixty feet; and we are told that 'four miles of the embankment of the railway were swept away;' and that 'locomotives, cars, and rails were hurled about by the sea like so many playthings.'

Also, as is usual in such catastrophes, the earthquake wave was propagated; and between four and five of the morning of the 10th, it (that is the sea) rushed upon the Hawaiian Islands in waves varying from three to thirty-six feet in height. Thus in eight hours the resistless oscillation had traversed the five thousand miles which separate the islands from the South American continent.

From this brief sketch it is obvious that there is much in this calamitous visitation to interest the physicist and geologist as well as the philanthropist. Information will in all probability be communicated from other places until the remotest points at which the disturbance was felt shall have been ascertained.

As relating to this subject we remark that the hair of Pele—a Hawaiian goddess—above mentioned can be produced artificially in a blast furnace. It has been described in former pages of this *Journal* as 'slag cotton.'

We learn by a communication from Hawaii to the American Journal of Science and Arts that a grand outburst occurred in February last, but ceased quite suddenly, to the disappointment of visitors who came expecting to see a volcanic display. As the vessel was steaming away, they saw in deep water, a mile off Kealahakua, the place where Captain Cook was killed, a remarkable heaving and bubbling, intermingled with jets of steam, and throwing up of pumice and light scoria. This commotion was still going on five weeks afterwards. It was occasioned by a subterranean lava-stream which, after rending the mountain slopes with deep fissures, found an outlet under the sea.

The Weather Review published by the United States Signal Service contains details of the wave which may be accepted as trustworthy. 'About 8.50 P.M. of May 9, heavy earthquake shocks were felt over the region between Arica and Mexillones (border of Peru and Bolivia). The oceanic wave which immediately followed was of great violence along the adjoining South American coast, and was felt also as far north as California, the rise at Anaheim being twelve feet in a few minutes. At Callao, Peru, the wave was felt at 11 P.M.; at San Francisco was perceptible at 6.18 A.M. May 10, with increase to a maximum of fourteen inches at 8.20. It reached the Sandwich Islands, eastern Hawaii, at Hilo, at 4 A.M.; and the great wave, thirty-six feet high, came in at 4.45. At Honolulu it was first felt at 4.45, and was followed by the great wave at five o'clock.'

In a subsequent communication it is stated that thirty-six hours after the inrush of the great wave at Hilo, the rising and falling still continued, 'the incoming and outflowing wave occupying about an hour, the latter leaving the channels nearly bare.'

Our American cousins are not disposed to accept their plague of locusts as an inevitable calamity, for the Entomological Commission appointed by the government at Washington have published two numbers of a *Bulletin*, with woodcuts, giving information on the natural history of the devouring insects and on the various methods proposed for their destruction. It is shewn that by systematic endeavours before the creatures get their wings they may be destroyed on a great scale, for then it is possible to drive them in enormous 'schools' or flocks as easily as sheep. Millions fall into long straight ditches dug as traps and there perish; millions more are crushed by rollers; hogs and poultry devour them greedily; and a number of ingenious machines stand ready to catch the winged locusts in the air or to capture them as they crawl. One of these machines produces a powerful upward blast which sucks up the crawlers from the ground, and drives them into a receptacle where they are smashed to a pulp. American ingenuity is roused by the swarming inroad, and it will be interesting to watch the struggle. Meanwhile the States adjacent to the Rocky Mountains are anxiously asking which is to conquer, man or locust?

Concerning the Colorado beetle, Mr Riley, State Entomologist for Missouri, reports that the eastward progress of the insect 'was at the average rate of eighty-eight miles a year, and that it has now invaded nearly a million and a half square miles, or more than one-third the area of the United States. It does not thrive where the ther-

mometer reaches one hundred degrees Fahrenheit, and hence it may never extend its range very far south of the territory now occupied; but its northern spread is not limited; and it may push to the northernmost limit of the potato-growing country.'

Special associations for special objects are a characteristic of the present century, so it seems quite natural that there should be a 'Society of Americanists,' whose object is to gather information about America. They meet once in two years; their next meeting is to be held next month at Luxemburg; and we learn from their programme that their inquiries are to apply to the times anterior to the discovery of America by Columbus. Thus the picture-writing of the Mexicans, their civil legislation under the Aztecs as compared with that of the Peruvians under the Incas; the inscriptions in the ancient cities of Central America, the ancient use of copper, the works of the mysterious mound-builders, the comparison of the Eskimo language with the languages of Southern America; traditions of the Deluge especially in Mexico; the discovery of Brazil, and other ethnographical and palaeographical subjects. If this scheme be wisely and diligently followed out, there is reason to hope that some light will be thrown into the obscurity of early American history.

A description of the great river Amazons and of the vast region watered by its affluents, by Mr R. Reyes, is published in the *Bulletin* of the Société de Géographie, at Paris. He calls it the American Mediterranean, and shews that by itself and its feeders, the noble stream borders the territories of Bolivia, Peru, Ecuador, Colombia, Venezuela, and Brazil. Ships of the largest class can navigate to a distance of three thousand miles from the sea, and ascend some of the tributaries from two to nine hundred miles, through a country rich and fertile almost beyond description. The forests produce four hundred different kinds of wood, mostly of excellent quality, as may be seen in the Museum at Rio Janeiro; and fruits, drugs, and minerals abound.

A tourist wishful to take a holiday in the tropics may now embark in the West Indies, cross to the mainland, steam up the Magdalena to the city of Purification in the Colombian State Tolima. Thence by a land-journey of three days he reaches the steamers on the affluents of the Amazons, and ends his voyage of four thousand miles on the great Brazilian river.

TO THE READERS OF CHAMBERS'S JOURNAL.

Next month will be commenced a Romance, in Three Parts, by 'ALASTER GRAEME,' entitled

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TREATMENT OF ANIMALS.

In our youthful days in the early years of the present century, little consideration was given to a systematic kindness to animals. Horses were overwrought without mercy, when ill-fed and with wounds which should have excited compassion. If they sunk down in their misery, they were left to die, the chances being that, in their last hours, they were inhumanly pelted with stones by boys;—no one, not even magistrates or clergymen, giving any concern to the cruelties that were perpetrated. All that we have seen, without exciting a word of remonstrance. A wretch who habitually turned out his old, overwrought, and half-starved horses to die on the town-green, never incurred any check or reprobation. His proceedings were viewed with perfect indifference. People, while passing along in a demure sort of way to church, would see a crowd of boys pitching stones into the wounds of a dying horse, and not one of these decorous church-goers endeavoured to stop these horrid acts of inhumanity. Like the Pharisees of old, they passed on the other side. Such within recollection is a small sample of the unchecked atrocities of our young days. Cats were pelted to death. Birds' nests were robbed. Dogs had kettles tied to their tail, and were hounded to madness by howling multitudes. Oxen were overdriven to an infuriated condition, and their frantic and revengeful career formed an acceptable subject of public amusement.

Barbarous in a certain sense as these comparatively recent times were, there had already been shewn instances of a kind consideration for animals. The poet Cowper, it will be recollected, wrote touchingly of the hares which he had domesticated. Sir Walter Scott's tender regard for his dogs has been recently noticed in these pages. There was here and there a glimmering consciousness that animals had some sort of claims on the mercy of mankind. What strikes one as curious is that society had retrograded in this respect. The oldest laws in the world, found in the early books of the Old Testament,

enjoin a kind treatment of animals. If we see an ass fall which belongs to some one with whom we have a cause of difference, we are to throw aside private feelings, and hasten to help the animal. We are not to take a bird when sitting on its eggs, or on its young; a most humane injunction. In various texts the Hebrews were enjoined to have due regard for the comfort of the ox, the ass, or any other animal which laboured for them. In these venerable records, mercy is enjoined towards all living creatures.

The modern world, with all its pompous claims to civilisation, strangely drifted into an entire neglect of these beneficent obligations. Throughout Christendom, any laws enforcing a kind treatment of animals are few in number, and of very recent date. Even within our remembrance, clergymen were not usually in the habit of inculcating that species of kindness to domesticated creatures which we read of in the Old Testament; nor were children ordinarily taught lessons of humanity within the family circle. The oldest statutory laws concerning animals are those for the protection of game; but these laws proceeded on no principle of kindness. They were intended only to protect certain birds and quadrupeds during the breeding season, with a view to what is called 'sport,' the pleasure of killing them by licensed individuals—the license for indulging in this species of luxury being, as is well known, pretty costly. It is not our wish to hold up 'sport' of a legitimate kind to ridicule. The chief matter of regret is the coarse way in which game is sometimes pursued and killed even by licensed sportsmen: their operations in what is known as a *baiting*, when vast numbers of animals are driven into narrow spaces, and shot down and maimed without mercy, being, as we think, no better than wholesale butchery; and not what might be expected from persons of taste and education.

Although in the early years of the present century there were no laws for the specific purpose of preventing cruelty to animals, thoughtful and humane persons were beginning to give attention to the subject. In 1809, Sir Charles

Bunbury brought into the House of Commons a bill for the 'Prevention of wanton and malicious cruelty to Animals.' Mr Windham, a cabinet minister, little to his credit, opposed the bill, and it failed to pass. The next attempt at legislation on the subject was made by Lord Erskine in the House of Lords in 1810. His measure was opposed by Lord Ellenborough, and had to be withdrawn. There the matter rested until 1821, when Mr Richard Martin, member of parliament for Galway, brought a bill into the House of Commons for the 'Prevention of Cruelty to Horses.' It encountered torrents of ridicule, and after passing a second reading in a thin house, was no further proceeded with. Mr Martin, however, was not discouraged. He felt he was right, and returned to the encounter. In 1822, he introduced a new and more comprehensive bill. Instead of horses, he used the word 'cattle'; this bill passed through all its stages, and became an act of parliament. This act of 1822 was the first ever enacted against cruel and improper treatment of animals. Let there be every honour to the memory of Richard Martin for his noble struggle on behalf of defenceless creatures. In 1825, he brought in a bill for the suppression of bear-baiting and other cruel sports. Not without surprise do we learn that Sir Robert Peel met the bill with determined opposition, and that it was thrown out. To think that so eminent a statesman as Peel should have been a supporter of bear-baiting! No fact could better present an idea of what was still the backward state of feeling among educated persons on the subject of cruelty to animals.

The year 1826 found Mr Martin still at his post. He framed a bill to extend protection to dogs, cats, and other domesticated animals from cruelty. In this it might have been expected he would have been successful. But no. His arguments to move the House of Commons were unavailing. Mr Martin died in 1834. Not until 1835, when more enlarged ideas prevailed, was there an Act to throw a protecting shield over cattle in the market, on the way to the slaughter-house, and in the roads and streets generally; over all such animals as dogs, bulls, bears, or cocks, kept for purposes of baiting or fighting; over all animals kept in pounds or inclosures without a sufficiency of food or drink; and over all worn-out horses, compelled to work when broken down with weakness or disease.

It was reserved for the beneficent reign of the present Queen to see a comprehensive Act of Parliament for the prevention of cruelty to animals. This was the Act of 1849 (which was extended to Scotland in 1850), that now forms the basis for prosecuting cases of cruelty, and may be called the charter which conferred on domesticated animals a right to protection. Lamenting the backwardness of England in establishing such a charter, it is not without pride that one knows that England was after all the first country in modern times to enforce the principle that the lower animals are entitled to be protected by law. That principle, as we have shewn, is not new. It was recognised by the ancient Hebrews, and it is pleasing to feel that at length modern common-sense has legislatively assumed its propriety. Latterly, there have been several additional Acts of Parliament, chiefly

as concerns protection to sea-birds and small land-birds; but while well meant, these Acts are very imperfect. The eggs of sea-birds not being protected, the nests of these animals may be rifled with impunity. As regards small birds, a number are left out in the list of protected animals—the skylark for one. These deficiencies are unfortunate. Sea-birds, though generally looked on with indifference, are of great public utility. They benefit agriculturists by eating the worms and grubs in newly ploughed land; they hover over parts of the sea and point out where there are shoals of herring and other fish; they are useful to the mariner in foggy weather, by their warning cries near the rock-bound coast. How beautiful that arrangement of Nature, in making provision for birds to live on shelving rocks by the sea-shore, there to act like beacons, in warning off the bark of the mariner from a coast that would cause its destruction! Considering that wonderful provision, how scandalous, how short-sighted the practice of rifling the nests of sea-birds! A supplementary Act to protect the eggs of sea-birds cannot, as a matter of public duty, be too soon passed. Already, on some parts of the coast, sea-birds are said to be rapidly disappearing.

As every one knows, dogs are often lost in large towns, and roam about miserably in search of their master or mistress. A sight of them in such circumstances is exceedingly pitiable. In the Metropolis, a humane plan for succouring lost dogs has been established. Some years ago, a benevolent lady, Mrs Tealby, was enabled, by the aid of public subscriptions, to set on foot a temporary Home for Lost and Starving Dogs, which has existed since 1860. It is situated at Battersea Park Road. Any dog, when found and brought to the Home, is taken in and succoured under certain necessary conditions. If a dog, after being housed and succoured, is applied for by the owner (with satisfactory proof of ownership), the animal is given up on payment of the expenses of its keep. If no owner comes forward, every unclaimed dog is sold for the benefit of the institution, or otherwise disposed of according to circumstances. The Home is growing in usefulness. In one year recently more than three thousand three hundred dogs were restored to their former owners or sent to new homes. Many owners who recover their favourites through the agency of this institution, not only refund the expenses incurred, but assist the funds by subscriptions in the name of their recovered pets—as for instance, 'In memory of Pup,' 'For little Fido,' 'In name of darling Charlie,' 'The mite from an old dog,' and so on. This deserving and well managed institution is well worth visiting. Only, the visitor must be prepared to see painful demonstrations from some of the unhappy inmates. On the approach of the visitor, each animal eagerly hastens to see if he be his dear master. And when a sniff and a glance render too evident the fact that you are not the person wished for, something like a tear steals from the poor doggie's eye. The happiness shewn when one of the animals finds his lost master is equally expressive. Looking to the great good done in the cause of humanity by this meritorious Home for Lost and Starving Dogs, it may be hoped that efforts will not be wanting to establish similar institutions elsewhere.

There is another admirable establishment worth

referring to. It is known as the Brown Institution, from having been founded by the bequest in 1851 of a large sum of money by Mr Thomas Brown. Its design was the advancement of knowledge concerning the diseases of animals, the best mode of treating them for the purpose of cure, and the encouragement of humane conduct towards animals generally. The Institution combines the quality of an infirmary and a dispensary for animals belonging to persons who are not well able to pay for ordinary medical attendance, and therefore does not trench on veterinary establishments. Several thousands of animals are treated annually. The Institution, which is under the direction of the Senate of the University of London, is situated in Wandsworth Road, near Vauxhall Railway Station. As an hospital and dispensary for poor horses, dogs, and other animals, the Brown Institution is unique of its kind. As far as we know, there is nothing like it in the world. What a prodigious step in advance is the Home for Dogs, and the Institution now described, from the condition of things at the beginning of the nineteenth century!

In speaking of the improved treatment of defenceless creatures within recent times, a prominent place is due to the Royal Society for the Prevention of Cruelty to Animals, located in Jermyn Street, London. Standing at the head of all organisation of the kind in the United Kingdom, this Society may be considered the watchful guardian of the rights of animals, and without whose agency the laws we have enumerated would, as regards England, stand a poor chance of being enforced. The business of this Society is conducted mainly by the employment of persons all over the country to find out cases of cruelty, and to bring the offenders to justice. The Society diffuses hand-bills and placards in places where they may come prominently under the notice of persons likely to infringe the law. It further has issued various publications calculated to stir up the feelings in behalf of animals.

The hand-bills and placards deserve special notice. Sheep salesmen are reminded that convictions have been obtained against persons for ill-treating sheep by cutting and lacerating their ears, as a means of identifying them from sheep belonging to other consigners. Shepherds are warned, by a cited example, to abstain from a specified mode of treating sheep for certain maladies; because pain is inflicted, which a veterinary surgeon knows how to avoid, but which an ignorant though well-meaning shepherd may not. Farmers are reminded that it is a punishable offence to crowd too many sheep together on going to market; instances being cited in which eleven sheep were crammed into a small cart, with their legs tied tightly together. Captains of freight steamers are informed that penalties have been enforced against a captain for so overcrowding his vessel, on a voyage from Holland to the Thames, as to cause the sheep much pain and suffering; carriers and cattle-barge owners are under the same legal obligations.

In regard to cows, one placard cautions persons sending them to market with the udder greatly distended with milk, and from which the poor animals evidently suffer much pain. Cattle rearers are told that penalties have been enforced against one of their body for sawing off

the horns of fourteen heifers so close to the head as to cause blood to flow in considerable quantity, and to make the animals stamp and moan; the object of such a mode of cutting being to increase the market value of the horns. Butchers are reminded that it is a punishable offence to bleed calves to death merely for the sake of giving additional whiteness to veal. Consigners and carriers are alike reminded that the Act of 1849 imposes fines or imprisonment as a punishment for conveying animals in such way as to subject them to unnecessary pain or suffering; the neglect to give proper food and water to the animals, whether coming to market, at market, or in removal from market, is announced in another hand-bill to be an infringement of the same statute.

Drovers, by another hand-bill or placard, are cautioned against urging on cattle which by lameness are unfitted to travel along the roads and streets; and against striking animals on the legs so violently as to lame them: both are practices to which drovers are too prone, and both are punishable. Farmers, graziers, and salesmen are alike warned that the season of the year should be taken into account in the transport of shorn sheep. 'It is hardly conceivable that respectable farmers and graziers, merely for the sake of profit, can in the months of December, January, February, March, or April, cruelly strip a dumb animal of that warm woollen coat which the goodness of God has provided more abundantly in winter to protect it from the cold weather; or that any English salesman will lay himself open to a criminal charge of aiding or continuing the offence by exposing shorn animals for sale at such inclement seasons.'

Horses and donkeys find a place in the safeguards which the Society endeavours to provide, by disseminating placards and hand-bills pointing out the penalties for cruelty or neglect. It is an offence against the laws to work a horse in an omnibus, cab, or other vehicle when in an infirm or worn-out state. It is an offence to beat a horse in a stable with a degree of severity amounting to cruelty, merely to make it obedient, or still worse, through an impulse of angry passion. It is an offence to set a horse to drag a cart or wagon loaded with a weight beyond his strength; many coal-merchants and their carmen have been prosecuted and fined for this unfeeling conduct. It is an offence to cruelly beat and over-ride poor donkeys; useful animals which seem fated to be the victims of very hard treatment in the world. It is a significant fact that one placard is addressed to 'excursionists and others:' those who have witnessed the treatment of donkeys by their drivers, at Hampstead Heath, Blackheath, and the humbler grades of sea-side places where holiday people assemble, will know what this means. The Society aid the inspectors of mines, or are aided by them, in bringing to justice truck-drivers and others for working horses and ponies in an unfit state in coal-pits.

It was not likely that dogs would be left out of sight by the Society; the maltreating of such animals is the subject of some of the cautionary placards, especially in localities where rough persons, prone to dog-tormenting, are known to be numerous. Cats are the subjects concerning which other warnings are given, in regard to torturing or cruelly worrying. Fishmongers are reminded that

it is a punishable offence which many persons commit of 'putting living lobsters and crabs into cold water, and then placing them on a fire until the water is heated to boiling temperature, thereby causing them to endure horrible and prolonged suffering.'

That the feathered tribes should share the protection which the issuing of these placards is intended to subserve, is natural enough; seeing that the Sea-bird, Wild-bird, and Wild-fowl Acts were due in great measure to the Society. One placard states that it is a punishable offence to kill or wound any such birds (including the young in nests) within the prohibited period; and that those who sell such killed birds are also punishable. Another placard administers a similar warning in regard to wild-fowl, enumerating thirty-six species, all of which are to be safe from the gun, the snare, and the net from the 15th of February to the 10th of July, under penalties which are prescribed in the Act of 1876. Bird-fanciers are reminded that one of their fraternity was imprisoned for fourteen days for depriving a chaffinch of its sight as a means of improving its singing. Poultry-dealers are, in another hand-bill, cautioned against plucking live poultry, a cruel practice which, if proved, subjects the offender to three months' imprisonment. Carrying live fowls to market by their legs, with their heads hanging downwards; and exposing fowls to hot sunshine with their legs tied together—have brought the offenders into trouble. In another placard the patrons of pigeon-matches are warned that occasional cruelties practised by them or their servants come within the scope of the law. In one of the Society's publications, the cruelty of bearing-reins for carriage-horses is significantly pointed out.

The Society has been encouraged in its benevolent exertions by a letter from Her Majesty the Queen, addressed in 1874 to the Earl of Harrowby, in his capacity as President. There was an assembly in London of foreign delegates representing similar associations, on the occasion of the holding of the half-century jubilee of the parent Society. Her Majesty requested the President to give expression publicly to her warm interest in the success of the efforts made here and abroad for the purpose of diminishing the cruelties practised on dumb animals. 'The Queen hears and reads with horror of the sufferings which the brute creation often undergo from the thoughtlessness of the ignorant, and she fears also sometimes from the experiments in pursuit of science. For the removal of the former the Queen trusts much to the progress of education; and in regard to the pursuit of science, she hopes that the advantage of those anæsthetic discoveries from which man has derived so much benefit himself, in the alleviation of suffering, may be fully extended to the lower animals. Her Majesty rejoices that the Society awakens the interest of the young by the presentation of prizes for essays connected with the subject, and hears with gratification that her son and daughter-in-law shew their interest and sympathy by presenting those prizes at your meetings.'

Looking to the distinguished patronage of the Society from Her Majesty downwards, its vast array of supporters, and the large number of Societies which it has helped to originate at home and abroad, we naturally rely upon it for promoting a consolidation and expansion of the laws

against cruelty to animals. These laws, as has been seen, are composed of shreds and patches, brought into existence with difficulty, and in many respects imperfect. The time appears to have come when the whole should be combined in a statute applicable to all parts of the United Kingdom. That certain actions should be deemed cruelties punishable by law in England and not in Scotland, is anything but creditable, and not a little ludicrous. This is a point to which the attention of legislators should be seriously invited. From the fragmentary and confused condition of the statutes, we have experienced much difficulty in ascertaining what, as a whole, the law really is. This chaotic state of things detracts, we think, not a little from the glory which may be freely claimed by the English for their legislation in behalf of animals. A consolidated Act with all reasonable improvements, would be something to point to with satisfaction, and probably go far to insure a legalised system of kind treatment of animals all over the globe.

W. C.

FROM DAWN TO SUNSET.

A STORY IN THREE PARTS.

BY ALASTAIR GREME.

INTRODUCTORY.

EVERY man loves the land where he got life and liberty. The heart of the mountaineer is chained to his rugged mountain-home; he loves the wild and whirling blast, the snow-storm and the brooding clouds. Every true heart beats truly for country and for home. Thus the 'children of the peat-bog' and the fen cling to the illimitable wolds and the 'level shining mere,' beautiful even now.

Beautiful *then*, when long ago, primeval forests clothed the land. When in later times the bells of minster towers sounded far and near, and the deep bay of the Bruneswald hounds awoke the echoes of the wold; when old Crowland's towers gleamed through mist; and the heights of that far-famed isle, the Camp of Refuge, where, amidst blood and battle, and beneath the 'White Christ' uplifted, the gallant Saxon fought the wild Viking; where the Saxon made his last dread stand for England's liberty, while men fell dead, and bones lay bleaching on every island and valley of the fen.

Beautiful *now*, O Fen-land! where still I seem to hear the wild shout of your outlaw hunters, hunting the red-deer and the wolf; where still I seem to hear the war-cry of the men of Danelagh, or imagine the great fires sweeping the boundless plains. Wide are your marshes still, and dark and deep your woods; the keen winds bring the driving snow; dense fog and mist and drenching rains sweep strongly from the sea; dark and capricious are the autumn days, and full of storm; yet overhead stretches a free heaven, boundless and open; underfoot stretch the free plains, wide and open; and over all sweeps the magnificence of the cloud-scenery, unbroken and unopposed; and the splendour of

the sunrise and the sunset lights the low isles like flame.

PART I.—DAWN.

CHAPTER THE FIRST.

Thus did the sun rise and set in glory across the level lands of Enderby; old Enderby manor, where the Flemings had dwelt for centuries; old Enderby, with its 'clanging rookery,' its grand timber, its turrets and its towers. Under that arched gateway has swept many a gay cavalcade with hawk and hound; has passed slowly many a hearse with sable plumes and horses; has stepped many a brave bridegroom leading his blushing bride, while the far-famed bells of Enderby pealed out loud and clear.

It is nearly two centuries ago, and it is evening; the sun is setting. Sir Vincent Fleming stands under the gateway; he is booted and spurred; his juded horse stands in the court-yard, and has been ridden fast and far. Sir Vincent puts a whistle to his lips and whistles loud and shrill; he is looking across the wide holt with a smile—his eyes laugh under his thick black brows, and his long white hair is flowing free in the wind. He opens his arms wide, and there come flying towards him two little dark figures neck and neck, shrieking with laughter and with glee. Panting, breathless from their long run, a boy and girl rush through the gateway, and leap boisterously into Sir Vincent's arms.

'My two little pets of Enderby!' he cries, and there is a wall in his voice, half of sorrow and half of joy.

'An' what have you brought us, father?' asks Deborah, leaping and dancing in her gladness. 'I see your flaps are full!—Nay, Charlie; get away; you shall not have father all to yourself!'

But the boy fights hard. 'You are a greedy Debo!' he cried. 'Your thoughts are ever o' sweet-meats an' o' toys.'

'Nay; it is not so;' retorted Deborah shrilly and scarlet as a rose. 'I am glad when things come.—But father, I am gladder to have you come.'

'I believe thee, sweet heart!' and Sir Vincent, lifting little Deborah to his shoulder, and taking his boy by the hand, turned towards the house.

In those days many a care pressed hard on Sir Vincent Fleming. His beautiful wife, the mother of his children, lay dead in the little churchyard. For a short time the children had run wild; then for a time Sir Vincent gave them a hard, hard step-mother, and the children went from bad to worse. Little Deborah cut her hair like a boy, and the two ran away from home. But ere long the hard step-mother died, leaving Sir Vincent free and the children like two mad colts. Sir Vincent tried the experiment no more. He could not cope with his two wild ones; they were beyond him; they were given over entirely to old Dame Marjory, and she voted them 'a handful.' Never wilder youngsters trod the earth. The hot blood of the Flemings and the Stuarts, with a dash of cast not so easily pedigree'd, coursed in their veins, and they could not brook a word of opposition or reproof. Dearly did they love their father, and dearly loved they one another—in a wild way more intensely than either knew.

One day they were running in one of their mad

games, 'Hare and Hounds,' with all their village crew behind them, when their course led straight through the churchyard of Enderby. Vaulting over the low wall, they rushed bounding over the graves with yell and whoop and laughter. Soon the whole gay thoughtless throng passed away. But an hour after, in the twilight, a boy and girl came gliding back alone hand in hand; half-wild and half-scarred, they opened the churchyard gate, Deborah urging forward Charlie.

'What do you want?' asked the boy half sullenly. 'I'll not come!'

'I do want,' said little Deborah, 'to go to mother's grave! Dost know what we did, Charlie? An' my heart has ached ever since, nor could I hunt the hare for thinkin' of it. We trampled over mother's grave! When we jumped over yon wall, I tell you, Charlie, we ran on mother's grave! Come with me, Charlie, an' kneel down to her for forgive you an' me!' In the highest state of excitement, the little child caught his unwilling hand.

'But she won't hear us,' said the boy; 'mother's gone to heaven, Marjory saith. Thou art a girl!' he cried, as they stood beside the grave. 'These be bones that lie here. It is like your fancies! Mother's gone to heaven, I tell you.'

'That's true,' said Deborah; 'but mother sees her grave, an' she looks down an' has seen us run over it this day, an' laugh! Maybe she thinks we have forgot her; maybe she thinks we have forgot the prayers she taught us.—O mother, it is not so! With unconscious and most exquisite fervour, the little Deborah fell on her knees, and raised her eyes and clasped hands to heaven: 'We are naughty, but we've not forgot you, sweet mother. Charlie has not forgot you, mother; an' Charlie an' me look up to you as you are lookin' down, an' ask you to forgive us for treadin' on your sweet grave. Mother, dear mother, forgive us!'

The boy stood looking on in dogged silence, knitting his brows; but when he saw Deborah's tears, tears rushed to his own bright eyes. With a cry of passionate sorrow and remorse, he flung himself on his mother's grave and cried as if his heart would break. Charlie Fleming had idolised his mother. He was two years older than Deborah; he remembered the mother better. He never forgot her memory. Proud, reserved, and shy, he hid that memory in his heart, and would let no hand drag it forth. In his mad freaks, when old Dame Marjory, driven to distraction, solemnly upbraided him about his 'poor dear mother' and what she would have thought, he mocked, and ran away shouting his derisive laughter. Seldom would a tear dim those bright roving eyes; neither rod, nor threat, nor lecture made Charlie Fleming quail; clenching his teeth and his hands, he stood his ground like a little demon: his stubborn heart would have broken rather than yield a whit.

And what of Deborah Fleming? she who, at eight years old, cut her flowing locks like a boy, and ran away from home. She was not behind her brother in mischief, wit, or daring; wondrously bold was the spirit of the little Fleming. But the caprices of the child shall speak for themselves.

CHAPTER THE SECOND.

One afternoon Deborah was playing by the lodge-gates with little Margaret Dinnage, the bailiff's child, when a tall gipsy woman strode to

the gate and looked through. Meg ran away with a scream of terror, but Deborah stood and stared up at the gipsy.

She was a tall woman, dressed in faded red, with a yellow and scarlet shawl tied over her head; long glittering rings in her ears, and black, black eyes. Deborah never all her life forgot that woman looking through the gate; the vision was riveted on her childish memory.

'Come to me, pretty one,' said the woman, tossing her head backward; then imperiously: 'Come!'

'Where?' asked Deborah.

'Over yonder—to the camp. We want a pretty one like thee. I am gettin' old, child, an' I want you to come run arrands an' tell the fortunes o' the quality.'

'I am the quality,' said Deborah gravely.

'You!' retorted the gipsy, with sudden and savage scorn. 'You are o' the scum o' the airth!' Then in a moment the wild passion passed, she resumed her half-coaxing, half-imperative manner: 'Come, come, pretty love!'

Deborah had been half startled; now she knew not what to make of the gipsy woman. Did the gipsy really like her, and wish to be kind? Deborah had never moved her large wondering eyes from the gipsy's face.

'I will not come,' she said, 'without Charlie.'

'Well, fetch Charlie, quick!' answered the gipsy with intense eagerness, and stooping forward to whisper the words. Deborah drew back; something within her rebelled; the woman was too imperious and too bold.

'Charlie will not come,' she answered; 'he hates gipsies.'

'Then thou shalt come alone.' Quick as thought the long arm was thrust through the half-open gate and the iron hand round Deborah's wrist, as if to draw her out, when Deborah cried at the top of her voice: 'Jordan, Jordan, Jordan!' An old man in a red waistcoat and his shirt sleeves came running round the lodge from the wood, and at the same moment the gipsy woman, pushing Deborah violently backward, darted away. Deborah was thrown on the back of her head; she got up at once, and stood looking up at old Jordan in silence, with her hand at the back of her head.

'She hath hurt thee, the jade!' said the old man indignantly. 'What has she been a-sayin' and a-doin' to thee?'

Deborah gazed at her fingers: there was blood on them; she raised her clear gray eyes to Jordan's face.

'Why, she hath cut thy head open, my lassie, and badly too! I know them cussed gipsies! Spiteful demons! See ye never meddle with them agen. This comes on it.' And assuming a scolding tone, the old man took Deborah's hand and hurried her angrily into the lodge. He was frightened, very pitiful and very angry, all in one; now he coaxed, now he threatened.

'Let me bind up thy broken head, my lassie; it is broken badly. But thou'rt a brave little lady! This comes o' meddlin'; thou'rt all too inquisitive by half. Leave them gipsies alone; or sure as thou'rt alive, I'll tell the master. Now then, thou'rt a brave little lady. Doth it pain thee, Lady Deb?' He stooped to peer anxiously with his old gray eyes into his little mistress's face.

Deborah was sitting on a high chair in the

middle of the table, looking very white and grave. 'I should think it doth,' she said; 'you are a gaby to ask it, Jordan Dinnage. Finish to tie my head; and see that you do not tell father who cast me down,' she added with dignity.

The little Margaret was standing below, gazing upward at the operation in affright, with her round eyes and mouth wide open.

'Tell thy father!' retorted old Jordan with supreme disdain as he finished his surgery. 'Why he would burn the camp and all the varmin in it for this. Fine times there'd be for Enderby with them revengeful cats. They'd be burnin' Enderby. Where wouldst thou be then?'

'In the flames, Master Dinnage,' said Deborah coolly.

Old Jordan Dinnage laughed loud and long. 'Thou art a little bold wench!' he said; then turning to his little daughter, added with mock gravity: 'Mistress Dinnage, well mayst thou gape an' stare. Thy young mistress will be the death o' me; for floutin' an' for scorn, I never knew'd her equal.'

The little maiden went quietly home, rather proud of her bandaged head than not; and the sight was so little novel to Dame Marjory's eyes, that well as she loved the child, she scarcely asked a question. That night Deborah tossed in her little bed and could not sleep. The pain in her head she heeded not; her wild and fitful fancy was conjuring up the gipsy camp. A hundred tall figures went trooping by, all with yellow and scarlet shawls tied over their heads; and tall men with black eyes, and little children, little boys with beautiful black eyes and curly hair. Dogs were lying about, and great pots full of meat were slung on poles over fires, and the red watch-fires blazed over all. She fancied all these men, women, and children came and kneeled to her, and said she was their queen. One little boy, more beautiful than the rest, said he was destined for the king, and she would be his wife. Then they hung about her necklets and bracelets, and set a crown upon her head, and the little maiden saw herself queen of the gipsies. Deborah loved power, and knew the power of beauty. She fancied herself dancing before the gipsies, in the light of the fires, in a glitter and blaze of beauty.

On the other side of the room slept Dame Marjory; she was snoring loudly. Deborah, hot and excited, sat up and gazed round; she could not rest. She started up, and sped like a little ghost into the next room, to Charlie's bedside; she seized his arm, and shook it: 'Charlie, Charlie! The boy gave a cross snort. 'Charlie, art well awake? I have somewhat to tell, love. The gipsy camp is out on the fen, an' to-morrow I am goin' to visit them! You will come too Charlie, for there be dogs an' horses in plenty. An' mayhap you will be made the king. I mean to be the queen; for the gipsy woman has been to the gate this afternoon, an' invited me to go an' bring you along.'

Charlie stared in the dim light, well awake then, yet very cross. 'You! You are always "bringin' me along," forgettin' you are the youngest by two years. You are very wise an' grand. I am not so fond o' gipsy folk; they are sneaks and cowards.'

'Nay; they are not! If you are afeard, I'll go

alone; an' I'll ride on the vans from one end o' the world to the other. So good-en'en.'

'Stay!' cried the boy. 'You say I am afraid. Then you know it is a lie! A Fleming never knew fear. So father tells you. Dost say I am afraid?'

But Deborah, feeling the grasp of his hands on her arm, cried: 'Nay, nay; you are not afraid! Belike you are wise, an' that is why. But I will go alone.'

'Nay; that you shall not!' cried the boy, glad to see a way to change. 'Why, they would kill you,' he said, with an air of superior wisdom and scorn. 'If you will go, I go too. I will take my big stick, an' (say not a word) a knife under my clothes, for the gipsy folk be sly as foxes, an' in one minute might stick you through. I must be fully armed.'

'An' so must I,' quoth Deborah.

'You!' said the boy in loud derision; 'you are a girl; though I never knew that like for tomlorin'. Run to bed; an' we will see what to-morrow brings.'

CHAPTER THE THIRD.

The morrow saw Master Fleming and Mistress Deborah speeding along the fields. Charlie carried a mighty stick, cut from a tough ash-tree, and a knife beneath his skirts; Deborah too, secretly, had a long blade concealed, to her own heart's satisfaction. Drawn to danger like moths to candle-flare, these little hardy Flemings sought an adventure after their own hearts. When they reached the level downs and the long expanse of shining water, the gipsy camp burst full on view. It was a sight familiar to their eyes; the dauntless Charlie knew it well. Many an hour, when Dame Marjory, shut in with her pickles and preserves, thought Master Fleming intent over his books, he was riding a bare-backed pony on the downs amidst a ragged crew. Many a raid on those same camps had Master Fleming dared; and twice, hunted by them, had the bold boy fled for liberty, or life. So that, knowing the gipsy nature, he did not approach the camp with Deborah without misgiving or unprepared for fight.

'Now see; if the gipsies curse or hunt us,' he said to Deborah, as they paused, 'that you do not lay hold on me, but run for your life; you can run like a hare; so can I. They may not be best pleased to see us.'

With a heart that beat somewhat faster at her brother's words, Deborah gave assent, and they advanced hand in hand. But in another moment their approach was seen by one ragged sentinel, and with shrill cries of delight they were surrounded by a weird elfin band. Their eyes were beautiful and black, as in Deborah's vision; but upon close quarters, they were all rags and dirt. They swarmed round their old playmate, staring in dumb amazement at Deborah's fair loveliness. Charlie clutched his stick.

'Now stand back!' he cried, in a loud authoritative voice, 'an' I will give you copper pence.' He struck his stick on the ground, and the ragged boys and girls all started back and stood in a circle round them. Deborah was abashed and overwhelmed with admiration at her brother's potent sway; her eyes were riveted upon him. The youthful captain was aware of this, and with added dignity turned upon his troop: 'First, first, quoth

he, 'you must catch two ponies for Mistress Deborah an' for me, the biggest an' the best, an' we will race you. The first one who wins gets the prize; an' if I win or Mistress Deborah wins, we win the prize, an' give it to the first man in: an' that is fair play, seein' our ponies must be the biggest an' the best. But stay. Come on the common, and let them not see us in the camp. After the race is done, we will go an' speak to your grandan, old Dame Shaw, and stay the night mayhap.'

With yells of glee the whole troop rushed hooting over the common, tearing hither and thither after colts as tameless. Deborah's hat was off and her hair flying, the soul of glee was dancing in her eyes. They caught one restive steed; in a moment she was across his back like a boy, and in another minute they were off! Thus the hours fled away, all too fast for them; all the largess of the young captain was thrown away and scrambled for. Deborah's dress flew in tatters round her; she looked the wildest gipsy of them all.

Night came, and vainly through the shades of evening did old Dame Marjory, shading her eyes in the doorway, look for her truants. Sir Vincent was out, and not likely to return. At last she sought Jordan Dinnage, her ancient lover and Enderby's right hand. 'Jordan, has seen Master Charlie and Lady Deb? A pretty kettle o' fish to fry if they return not to-night, an' the master comes home 't' the mornin'. Go seek them, for heaven's sake, man. I am distraught!'

'Wiv, this comes, Mistress Marjory, o' lettin' the young Master run wild; he's a handful for thee! I know'd how 'twould end, when he's day an' night out gipsyin'. There's where they be, Mistress Marjory, with the gipsies; an' thank yer stars if ye ever set eyes on them agen!'

Old Marjory turned as white as her apron. 'Now, don't ye be goin' to frighten me, Jordan. But if ye speak truth, man, run with all the men you can get along, an' hunt them gipsies down, an' find my two poor dears. O their poor mother! O Jordan, Jordan, Jordan Dinnage!' And Marjory, with her apron to her face, cried as if her true heart would break.

This was too much for Jordan; he was arming already. Snatching a short rusty sword from the wall, and with one comforting hand-thud on Dame Marjory's back, and a 'Comfort thee, my lass!' the active old man was off. The hue-and-cry was raised—all Enderby rang with it. But behold the gipsy camp was gone! Smouldering fires blackened the common; no other trace of the fugitives was visible. But old Jordan rode and rode, with all his men behind him; some on horseback, some on foot, they scoured the country far and near. In vain did Dame Marjory and the servants sit up till morning dawn. It was only late on the following day that the bailiff rode up the avenue with another horseman, one carrying a boy before him, the other a girl; the dresses of both men and children were torn and travel-stained, and the head of Jordan Dinnage tied up. At this sight Dame Marjory ran forward and screamed, and all the women screamed.

'Here be thy children,' said Jordan; 'an' a hard fight we made for it. Keep a tight hand on 'em, Dame Marjory; but no scoldin' yet!'

So Charlie and Deborah, looking penitent and demure, but rejoicing madly in their hearts at

seeing home again, ran in. They were feasted royally in the servants' hall that day!

For many days Sir Vincent did not return, and Jordan Dinnage kept a sharp watch on the gate, to see that the children did not stir beyond. The old vicar called on the little culprits; he looked to daunt them by his words and presence. He was a sad-looking man with a long sorrow face; yet some quaint humour lurked in his nature too. Severely he bade Dame Marjory send 'Master and Mistress Fleming' to him. The boy stoutly rebelled; but at last hand in hand, scrubbed and ruffled, they were ushered into the room where the awful vicar sat. Charlie was dressed in a little black velvet doublet and hose, with silk stockings and buckle-shoes, and ribbons at his knees; his long red-brown hair was cut square on his white forehead, and flowed loose on his shoulders; his lips were set firm, his brown brows were knit, and his eyes, large dark and sombre like a stag's, glowered defiantly beneath them. Mistress Deborah was dressed in pale blue silk, pointed to her fairy shape, and trimmed with rose-coloured ribbons; her hair was in hue like her brother's, and cut the same in front, but falling lower behind, and tied at the end with a bow; her lips were apart, and her white teeth gleamed with irrepressible humour; her large bright eyes, gray like a falcon's, gleamed with laughter too; she half hung behind her brother, with her head upon his shoulder, saucy yet shy.

The vicar, in his long black clothes, gazed upon the pretty picture from a high-backed chair, stern, melancholy, resigned. The little Flemings stood before him just as they had entered. 'Children,' quoth the vicar of Enderby, 'it hath afforded me great grief to hear of thy misdeeds; they have been reprehensible in the extreme. Thou hast encouraged vagabondism, and run near becoming vagabonds thyself; in fine, thou hast outraged propriety and set all social laws at defiance. To thee, Charles, I should have looked, in thy father's absence, to set an example to thine inferiors, to guard the house, and to protect thine infant sister (or little better than an infant, either in years or discretion). Thou hast proved thyself, Charles, incapable of either charge; indeed, if thou art not sent to school, to feel a master's rod, I entertain great fears for thy future, and so I shall inform thy father. To thee, Mistress Deborah, I say little; thou art young and inexperienced, though much given to vanity, it is said, both in dress and person; but though thou art as yet incorrigible, I would have thee reform, and entertain some hopes of thee. Thou art the future mistress of this house; how then, when thou comest to years of discretion, wilt thou fulfil thy duties of mistress and of hostess, if thou dost now run wild amid grooms and gipsies? Mistress Fleming, Mistress Fleming, I have much against thee! What induced thee the second time to run away from such a home as this?' But Deborah only hung her head and smiled.

Then quoth Charlie sturdily, glowering with his red-brown eyes: 'She loves the gipsies, like to me.'

'Charles, Charles!' said the vicar, 'I will not bandy words with thee. Forsake such evil company, and stick to thy Latin more.'

'I don't love Latin, Master Vicar, an' never shall.'

'Goodsooth, thou wilt and shall. What wouldst thou be? Wouldst idle here all thy days?'

'I'd be a soldier.'

'A soldier? An ungodly set!'

'Father says the priests are the ungodly ones.'

At this the vicar held his peace in despair.

'I'd be a gipsy queen,' chimed in Deborah's treble voice. 'Dost not love the gipsies, Master Vicar? When I am a woman grown I'll run off and travel over the world—I will! Charlie does not love Latin; no more do I love Dame Marjory's lessons.' And forgetting her fear, she nestled up to the vicar's side and gazed up with her laughing dauntless eyes. At that moment the clank of horse's hoofs resounded on the stones of the courtyard.

A TYROLESE CATASTROPHE.

MANY and varied are the calamities to which those people are exposed who have their abodes among the grim mountain fastnesses of Switzerland and the Tyrol, or indeed who live in any similarly situated region, where Nature still reigns in undisputed majesty, and manifests her power by those swift and awful catastrophes which strike terror to the hearts of all who come within their influence. In winter the snow falls heavily and constantly, and forms a huge overhanging mass, that overtops the often narrow pass below, and is suspended, like the sword of Damocles, by the slightest possible retaining hold; a trifling noise, such as the discharge of a rifle or even the prolonged blast of the Alpine horn, being sometimes sufficient to dislodge the vast snow-wreath, and send it gliding on its silent but deadly course towards the valley beneath. The destruction caused by the overwhelming avalanche is too well known to need description. Scarcely a Swiss hamlet or mountain pass but has its record of some sad calamity caused by the resistless force of those fatal snow-falls. Single travellers, parties varying in number, chalets, and even entire villages, have on different occasions been buried under the snow; no warning having been afforded to the hapless victims till the icy pall of death descended relentlessly upon them, and hid them, sometimes for long months, sometimes for ever, from their fellow-men.

Those who live on the banks of the narrow, swift-running torrents that intersect the valleys, have another danger to encounter. Those little streams, greatly swollen in summer by the melting of the snow on the higher ranges of the mountains, frequently overflow their boundaries and spread destruction and death around. If, as occasionally happens, the stream becomes choked by débris from the overhanging precipices, it is turned aside from its natural channel, and flows in quite another direction; sometimes forming in its progress a lake or a small tarn, which never again subsides, and which may destroy in a moment the long and arduous labour of the husbandman.

A third and even more tremendous catastrophe is that known as a berg-fall or mountain landslide; when an overhanging portion of some steep precipice becomes loosened from its foundations,

and on some unusual impetus being given to it, topples suddenly over and huris itself upon the plain beneath it. These berg-falls occur very frequently in the Tyrol, sometimes occasioning comparatively little damage, and even adding an element of picturesqueness to the great natural beauty of the region; while on other occasions they are followed by widespread havoc and destruction.

In 1771 a terrible calamity of this nature befell the little village of Alleghe, situated on the banks of the river Cordevole, not far from the town of Cavinle in the Tyrol. The district was a fertile and beautiful one, with several scattered villages surrounded by orchards and corn-fields, and protected from the fierce blasts of winter by the range of high mountains, which were at once its safeguard and its peril. At the base of one of the loftiest of this great range, called Monte Pezza, stood the little village of Alleghe. In the month of January, when the mountains around were all covered with heavy snow, a charcoal-burner was at his work in the woods of Monte Pezza, when his attention was suddenly arrested by a distinctly tremulous movement of the ground, and by the frequent rattling down of stones and debris from the rocky precipices behind him. These were sufficient indications of danger to the practised ear of the mountaineer. He knew too well the portents of those overwhelming catastrophes that are continually to be dreaded; and on listening more attentively, he became convinced that serious peril was impending. Even as he watched, several large boulders became detached from the face of the mountain, and rolled down to a considerable distance; while at intervals the trembling motion of the ground was too evident to be mistaken. It was growing late in the afternoon, and darkness would soon fall on the valley; so hastily quitting his work, he made the best of his way down to the nearest village, and with the excitement naturally caused by anxiety and fear, he told the inhabitants of the alarming indications he had just witnessed, and urged them to make their escape without loss of time from the threatened danger. Strangely enough, they seem to have attached no value to the signs of approaching mischief which the man described to them; and it would appear that they considered the falling debris to be attributable to some accidental snow-slip, caused possibly by the warm rays of the noonday sun.

Whatever they may have thought, they paid no heed to the warning; and the charcoal-burner having done all he could to save them from the threatened calamity, went on as fast as possible to carry his terrible news to three other villages, which were all directly exposed to the like danger. But they also utterly disbelieved in it, and laughed at the fears of the poor man, who in breathless and agitated condition clearly testified to the truth of his conviction that a very great peril was close at hand. One and all, they refused to quit their dwellings; and the charcoal-burner, having vainly endeavoured to awaken them to a sense of their danger, quitted the spot himself, and sought shelter elsewhere. Hours passed, and no further disturbance of any kind taking place, the villagers concluded the whole thing to have been a false alarm, and at night all retired to rest as usual, without apparently a shadow of misgiving.

Suddenly, in the midst of the silence and darkness, a fearful crash of falling rocks sounded far and wide through the valley; and when the first rays of the sun lighted up the mountain peaks, a terrible scene of ruin and death was revealed. The four little hamlets had entirely disappeared; two of them, those that lay nearest to the slopes of Monte Pezza, were completely buried under an immense mass of fallen earth and rocks; the other two were submerged beneath the waters of the river Cordevole, which had been driven from its course by the berg-fall, and had spread out into what is now known as the Lake of Alleghe. None of the unhappy victims had a moment's time for escape, even had escape been possible. The rushing down of the mountain was instantaneous, and buried them as they lay sleeping; and the water flowed with impetuous rapidity into the unprotected villages, not one inmate of which survived to relate the experiences of that awful night.

Some months passed; and the first horror of the catastrophe had a little faded, when another berg-fall took place, again followed by lamentable consequences. It occurred in the month of May and in daylight; but a much smaller loss of life was the result, though the destruction of property was even greater than on the previous occasion. Owing to the tremendous force exerted by the falling debris, the waters of the lake, which had never subsided since its formation, instantaneously rose into an enormous wave, and rushed violently up the valley; wrecking houses and farm-buildings, destroying the flourishing orchards and corn-fields, and carrying away a portion of the parish church of a village which had been re-called Alleghe, after the submersion of the first of that name. The organ of this church was forcibly swept to a considerable distance; and a tree borne along on the mighty wave was dashed into an open window of the curé's house, while he was sitting at dinner, the servant who was attending on him being killed on the spot. Many lives were lost during this second great berg-fall, and terrible consternation was created in the minds of the inhabitants of the district, which seemed to have been so specially singled out for misfortune.

Since that time, however, no other serious disaster has befallen them; the huge mountains of the neighborhood have not again hurled death and ruin on the smiling valley at their feet; and the little lake of Alleghe, the principal memorial of the catastrophe, is only an added beauty to the lovely scenery which surrounds it, and lies there in serene tranquillity, all unconscious of the beating hearts for ever stilled beneath its waters, of the happy homes rendered dark and desolate by its cold cruel wave. More than a hundred years have passed since then; many generations of villagers have lived and died, and the recollection of the great berg-falls of 1771 has faded into a mere tradition of the place; but yet, looking down into the clear depths of the lake, on a day when there is no wind to raise ripples on its surface, the outlines of the submerged villages can be distinctly traced. Roofs and walls of houses can yet be distinguished; it is even said that the belfry of the church is visible, flights of stairs, and many other relics of the past life of the drowned inhabitants.

On the 21st of May in each year, the date of

the second of those great disasters, a solemn commemorative service is celebrated in the little church of Alleghé, and masses are performed for the souls of those who perished in the two fatal berg-falls of 1771.

SINGING AND TALKING BY TELEGRAPH.

PEOPLE are already to a certain extent acquainted through the newspapers with what is called the Telephone, or instrument for transmitting musical sounds to a distance. We wish to say something of this novelty. The conveyance of sound by means of an electric wire, has been practised through the instrumentality of the *bell telegraph*, used occasionally, though much less frequently than apparatus of a different kind. The signaller does not himself ring a bell, but sets in vibration a bell at the further or receiving end of the wire. The electric current, passing through the wire, acts upon a small magnet, and this in its turn acts upon a small bell or its hammer. By a preconcerted arrangement, one single sound is understood to denote a particular letter or word; two denote another letter or word; three quickly repeated, have a separate meaning; three separated by unequal intervals of silence, another—and so on. The receiver must have a quick ear, and much practice is necessary for a due fulfilment of his duties. Although the plan has an advantage in enabling him to understand a message in the dark as well as in the light, it has more than equivalent disadvantages; among which is the fact that it leaves no permanent record.

But talking by electricity conveying the actual sounds of the voice for many miles—what are we to think of this? And a song—the words, the music, and the actual quality of the singer's voice; does not this seem almost beyond the powers of such a mode of transmission? Who first thought of such a thing is not now known. Very likely, as in most great inventions, the same idea occurred to many persons at different times, but was laid aside because the mode of realising it was not sufficiently apparent.

It was about 1860 that Reis invented a contrivance for employing a stretched membrane vibrating to a particular pitch or note; a contact-piece was adjusted near the membrane; and a series of rapid contacts sent a series of clicks along an electric wire to an electro-magnetic receiver at the other end. But the apparatus could only convey one note or musical sound.

Four or five years ago, Mr Edison, a telegraphic engineer at Newark in New Jersey, made an attempt in this direction. It is known that, in one form of automatic chemico-electric telegraph, signals are recorded by sending an electric current through prepared paper saturated with a chemical agent which changes in colour wherever the current touches it; the paper is moved on equally, and a pen or stylus rests upon it, conveying the impulse received from the electric wire. Mr Edison has tried to devise an arrangement for producing sound as well as discoloration, something for the ear to hear as well as something else for the eye to see. We are not aware whether his experiments have been sufficiently successful to produce a practically useful result.

In 1874, M. La Cour sent audible signals from Fredericia to Copenhagen, by means of a tuning-

fork, a contact-piece, a telegraphic wire, and a key to set the fork in vibration.

Mr Elisha Gray appears to have made a more definite advance in this direction. He has transmitted the pianoforte sounds of a concert through the wire of an electric telegraph. The performer played at Philadelphia, to an audience at New York, ninety miles distant. The apparatus may be called a telephonic piano; it transmits the sounds of that instrument, but of no other. Public performances of this kind were given in the early months of the present year. On one evening the instrument was played at Chicago, and the music heard at Milwaukee, eighty-seven miles distant. *The Last Rose of Summer*, *Yankee Doodle*, *The Sweet By-and-by*, and *Home, Sweet Home* are named as the tunes thus played. On a second occasion the apparatus triumphed over a distance of no less than two hundred and eighty-four miles, from Chicago to Detroit; not much was attempted in actual music, but the sounds were audible at this great distance. Two instruments are required, a transmitter and a receiver. There is a keyboard of two octaves (available therefore only for simple melodies), a tuning bar, an electro-magnet, and an electric circuit. The play on the keys with the fingers produces vibrations, thuds, molecular movements, in rhythmical succession; these are transmitted by the electric wire to the receiving apparatus at the other end. This receiving apparatus is a large sounding-box, on which is mounted an electro-magnet. The box intensifies the sounds by its sonorousness, through the medium of the slight touches which the magnetised iron gives to the box at every expansion or elongation which the electro-magnetism gives it. Delicate experiments have shewn that there is a minute difference in the length of a bar of iron when magnetised and demagnetised; and Mr Gray appears to have taken advantage of this property in causing his magnetised bar to give a succession of taps to the resonant box. We believe that the apparatus requires wholly new setting for each tune. If so, the system bears the same relation to real pianoforte playing as the barrel organ does to the church organ; it does not lend itself to the spontaneous or extempore effusions of the player.

More comprehensive, so far as the scientific descriptions enable us to judge, is Bell's *telephone*, for the transmission of talk and sing-song as well as of instrumental sounds. If present indications should be really justified by future results, the imagination can scarcely picture the number of practical applications that may ensue. The inventor, Mr Graham Bell, went to America in 1871. He is the son of Mr Alexander Melville Bell, whose system of 'Visible Speech' has attracted a good deal of notice on both sides of the Atlantic. Both father and son have been practically engaged in perfecting a system for teaching the dumb to speak; and Mr Graham Bell set himself the task of accomplishing something which would justify him in saying: 'If I can make a deaf-mute talk, so can I make iron talk.'*

Mr Bell, when at Salem in Massachusetts, began

* The subject of 'Visible Speech' is not unfamiliar to the readers of *Chambers's Journal*. In the number for May 12, 1896, a succinct account of the system is given—a system intended to remedy the utter want of agreement between the appearance and the sound of a letter or a word.

to turn his attention to this subject, the telegraphy of sound, or *telephony*, in 1872; but three years elapsed before the matter assumed such a form as to enable him to send a little musical message through a two-mile wire. Securing his invention by a patent, he gave his first public exhibition of the system in the autumn of 1876. The talk or speaking of an operator at Cambridge, Mass., chasette, was heard at Boston, in the ordinary conversational tones. It does not appear that the actual quality or *timbre* of the voice was distinguishable, but only a voice, speaking certain words. Early in the present year, however, further improvements were made in the apparatus which enabled it to shew even this kind of delicacy; that is, it transmitted not merely the words in sound, but also the tones and inflections of different voices. Singing being, in regard to acoustics, only one variety of speaking, it follows almost as a matter of course that if the apparatus can talk it can also sing. Accordingly, a lady sang *The Last Rose of Summer*, and was distinctly heard at the distant station; the sounds 'had about the same effect as if the listeners were at the rear of a concert-hall, say a hundred feet from the singer.' The sounds of laughter and applause were similarly transmitted, with the proper rhythm and key or musical pitch. In instrumental music a violin could be distinguished from a violoncello; a test more delicate than would be supposed by many persons.

In all the earlier experiments of Professor Bell, he employed galvanic batteries to produce the current; but these were afterwards dispensed with, and their place supplied by permanent magnets. With this improved arrangement, sounds were conveyed through a wire to a distance of a hundred and forty-three miles, from Boston to North Conway in New Hampshire. Last February a lecture was delivered, on the subject of Telephony, by Professor Bell at Salem, and was audible, word for word, at Boston. In order to shew that the transmission is equally available in both directions, provided the proper apparatus is at both ends, the lecture from Salem to Boston was followed on the same evening by singing and speech-making from Boston to Salem.

From the patent specifications and from the descriptions in American scientific journals, it would appear that a phonographic reporter of some skill is needed, to translate the audible sounds into words and write them down. We must first comprehend, however, the mode in which the sonorous transmission through the wire is brought about; for this it is which really constitutes the principle of the telephone. Ordinary telegraphic coils of insulated wire are applied to the poles of a powerful compound permanent magnet; and in front of these is a thin vibrating diaphragm or membrane, with a metallic contact-piece cemented to it. A mouth-piece, or trumpet mouth, fitted to collect and intensify waves of sound, is placed near the other surface of the diaphragm. It is known that the motion of steel or iron in front of the poles of a magnet creates a disturbance of electricity in coils surrounding those poles; and the duration of this current will coincide with the vibratory motion of the steel or iron. When, therefore, the human voice (or any other suitable sound) impinges through the tube against the diaphragm, the diaphragm

itself begins to vibrate, and the contact-piece awakens (so to speak) electrical action in the coils of wire surrounding the poles of the magnet; not a current, but a series of undulations, something like those produced by the voice in the air around us. The undulations in the coil produce a current in the ordinary telegraph wire with which it is placed in connection. A similar apparatus at the other end is hereby set in action, but in reverse order; that is, the wire affects another coil, the coil another diaphragm, and the diaphragm another tube, in which the sounds are reproduced in audible vibrations.

It is said that even a whisper can in this way be reproduced at a distance, the maximum extent of which may possibly be much greater than has yet been achieved. At one of the exhibitions given to illustrate this system, Professor Bell stationed himself in the Lyceum at Salem; Mr T. A. Watson at Boston. An intermittent current, sent through the eighteen miles of telegraphic wire, produced in the telephone a horn-like sound. The Morse alphabet was then transmitted in musical sounds, audible throughout the lecture-hall. Then the sounds of an organ were made to act upon the apparatus, and these in like manner were transmitted; two or three tones being distinctly heard in succession at Boston. Professor Bell then signalled to Mr Watson to sing a song; this was done, and the words as well as the tune of the song heard. A speech was then made at Boston in the simple words: 'Ladies and gentlemen, it gives me great pleasure to be able to address you this evening, although I am in Boston and you in Salem.' This speech was heard distinctly in the Lyceum at Salem, and was followed by many questions and answers sent to and from.

If monotonous be adopted instead of those variations in pitch which belong to ordinary music, it is believed that several telephonic messages may be sent through the same wire at the same time. It would be agreed on beforehand that all sounds in C (for instance) shall be intended for one station alone; all those in D for another station, and so on; each diaphragm would vibrate in the manner belonging to the sound-waves impinging upon it; but each station would attend only to those in a particular pitch. Such is the theory. Whether it can be practically carried into effect, the future must shew.

Mr Cromwell Varley, during his researches in duplex telegraphy, produced an apparatus which he is now trying to apply to telephonic purposes. A limited amount of success was achieved in July of the present year, through an electric wire connecting two concert-halls in London; but the apparatus requires further development. It comprises among other details a series of tuning-forks, one for each note.

There does not, so far as description goes, appear a probability that telephones would be so applicable as the machines already in use for ordinary telegraphic purposes; for reasons which we need not detail here. The conveyance of sound is the novelty; and whimsical suggestions have been put forth concerning the possible results, such as the following: 'One of the first steps which a young couple, upon their engagement, would naturally take, would be to have the speaking-wires laid down to their respective rooms, and then, at any time, far from the curious eye of the world, they would be

able to indulge in sweet converse.' Another: 'The extension of the system might not prove so pleasant in other cases. Thus, for example, university authorities might take it into their heads to attach an instrument to every room in the college, in order that the young men might report that they were steadily at work every quarter of an hour.' Another: 'It is hardly going too far to anticipate the time when, from St James's Hall as a centre, Mr Gladstone will be able to speak to the ears of the whole nation collected at a hundred different towns, on Bulgarian atrocities, or some other topic of burning interest. Nor need we despair of seeing Herr Wagner, from his throne at Bayreuth, dispensing the "Music of the Future" in one monster concert to St Petersburg, Vienna, London, New York—in short, to all the musical world at once.'

'HELEN'S BABIES' AND 'OTHER PEOPLE'S CHILDREN.'

THE two small volumes which give the title to this article, afford an amusing account of the troubles that befell Mr Burton in ten days, during which he somewhat rashly undertook the supervision of his sister Helen's Babies, the best children in the world (so their mother assures him), and of the vicissitudes through which his young wife subsequently passed, while endeavouring to manage 'Other People's Children.' To many, the incidents will appear too ridiculous; but it is to be kept in mind that the children are American, who for the most part are allowed to do pretty much as they like, and who, amongst other tastes, possess an untiring voracity for 'candy.'

When we first make his acquaintance, Harry Burton, a salesman of white goods in New York, is a bachelor aged twenty-eight, and is in some doubt as to where he shall spend a short holiday, so as to secure a quiet time for reading; when he receives a letter from his married sister, Mrs Lawrence, asking him to go to her house, while she is absent with her husband on a few days' visit to an old school-fellow. She admits that she is not quite disinterested in making the request, as she shall feel easier about her two small boys Budge and Toddie, aged respectively five and three, if there is a man in the house; but promises him undisturbed quiet, and leisure for improving his mind.

Mr Burton accepts with alacrity, having a vivid recollection of a lovely house, exquisite flowers, first-rate horses, and unexceptionable claret and cigars; to which the remembrance of the pure eyes and serene expression of his elder nephew (whom he has only seen on flying visits to his sister) lends an additional charm. It occasions him a slight misgiving when the driver of the fly in which he proceeds from Hillcrest Station to Mrs Lawrence's house, alludes to his young relatives as 'imps;' and it is not without some heart-sinking that he meets them on the road, in torn and disreputable garments, each bearing a dirty knotted towel, which Budge promptly informs

his uncle are not towels, but 'lovely dollies.' Mr Burton is self-sacrificing enough to hoist the boys into the carriage; and it is rather hard on him that, just as Toddie raises an awful yell, on being forbidden to try and open a valuable watch, they should meet another carriage containing Miss Mayton, a charming lady, whose presence at Hillcrest, we imagine, may have had something to do with determining Mr Burton's movements. However, the lady is gracious in spite of the dusty and heated appearance of her admirer, caused by his contest with Toddie, and he arrives at his destination in a celestial frame of mind.

He is rather dismayed when left alone with his nephews at the supper-table, feeling that he will get nothing to eat while he is called upon to supply the inexhaustible demands of the two young cormorants; and at the conclusion of the meal he hastily rids himself of them, as he fondly hopes, for the night. Vain hope! As he strolls in the garden smoking a cigar, dreaming of Alice Mayton, enjoying the fragrance of the roses, and above all the perfect stillness of everything around, he is roused from his reverie by hearing Budge's voice overhead, and is met by a demand from a little white-robed figure for 'stories.' Mr Burton is too tender-hearted to resist the wistful expression of Budge's countenance, and he complies; but he fails to compare favourably as a *raconteur* with the absent papa; and Budge assuming the position of narrator himself, gives his version of the history of Jonah. We cannot help laughing at his description of the prophet, who 'found it was all dark inside the whale, an' there wasn't any fire there, an' 'twas all wet, an' he couldn't take off his clothes to dry, cos there wasn't no place to hang em.' Songs succeed to stories, and at length Uncle Harry thinks he is free; but he reckons without his host. Budge insists that his uncle shall hear him say his prayers in the exact manner in which 'papa always does;' concluding his devotions by an immediate and pressing request for candy. But Toddie's prayer must be said first, in which a special petition is offered for the welfare of his 'dolly.' Then, the candy being forthcoming, there arises a clamour for pennies, drinks, and finally for the 'dollies;' which tiresome objects being found, Uncle Harry once more beats a retreat, and settles himself for a little serious reading, experiencing, however, one more interruption from Budge, who appears before him and requests his blessing before he finally turns in. Papa says 'God bless everybody,' persists the boy, when his uncle endeavours to satisfy him with a simple 'God bless you;' and we fully echo Mr Burton's sentiment: 'Bless your tormenting honest little heart, if men trusted God as you do your papa, how little business there'd be for the preachers to do!' The remainder of the night is tranquil enough, for we pass over such minor incidents as shrieks from Toddie for his dreadful 'dolly,' which has been mislaid among the bed-clothes, and the very early rising of Budge,

should be the first to inform Mrs Mayton of her daughter's engagement, we, knowing that young man, find only natural; and we are glad to be able to state that it is done with the same tact which distinguished his efforts to bring the young couple together. Toddie once more endeavours to put a period to his existence by swallowing a bottle of paregoric, but is fortunately cured in time to meet his father and mother at the station on their return, by a process which causes him more to resemble the whale than his favourite Jonah.

For a time Mr Burton has been too busily occupied to chronicle any more of the doings of the amusing 'babies.' He has married, bought a house, and settled in the neighbourhood of Tom and Helen Lawrence. We feel sure that Mrs Burton will prove no less admirable than Miss Mayton; indeed, recently breaking silence, her adoring husband has assured us that so it is; but as there are spots on the sun, so do we find that Mrs Burton has one slight weakness—namely, a conviction that she thoroughly understands how to manage 'Other People's Children.' Entirely disapproving of the manner in which her husband had allowed those two ridiculous children to tyrannise over him, and turning a deaf ear to his energetic assertion that all his time was occupied in saving their own lives and their parents' property from destruction, that admirable woman announces her views on the subject of their training. 'You should have explained to them,' she says, 'the necessity for peace, order, cleanliness, and self-restraint. Do you imagine that had you done so, their pure little hearts would not have received it all and acted upon it?' Mr Burton seems doubtful; but his scepticism only makes her rejoice still more in the prospect of speedily having Budge and Toddie under her own hands, during their mother's unavoidable seclusion in her own room on business of the utmost importance. Budge and Toddie presently arrive with the exciting news that there is a new little sister-baby at home, and that they have come to stay a few days. Mrs Burton is determined that her system of education shall begin at once, being anxious to prove its efficacy to her lord and master; but the boys have immediately disappeared, probably in pursuit of the dog Jerry (who has judged it prudent to retire into private life on their advent), and are discovered pickling tomatoes for their aunt by means of 'Mexican Mustang Liniment' and 'Superior Carriage Varnish.' We imagine Budge may have had some reason for his remark: 'I don't think you act very nice about presents and surprises.' Toddie spends the morning in a praiseworthy effort to hatch some chickens; but although he sits down 'ever so softly' because he 'hasn't got fessers,' the result is such as to necessitate a visit to the bath-room.

Undismayed by these beginnings, Mrs Burton, on preparing to go out in the afternoon, leaves the boys as it were in charge of the house, appeals in touching words to their sense of the beautiful not to disarrange anything, telling them that people should always try to make the world prettier, and departs with a quiet mind. Whether she thinks her method is attended with unequivocal success when she finds, on her return, that they have acted on her hint, and endeavoured to 'make the world prettier' by manufacturing—of stones, road-dust, and a noxious smelling weed—a fernery

in her best drawing-room (it narrowly escaped being watered), we will not too curiously inquire.

Our author's account of her numerous encounters with Toddie—theological and other—from which she invariably issues worsted, and with increased respect for the force of character which Mr Burton had long since recognised in that young gentleman, is most laughable. She tells the boys interesting anecdotes and stories full of moral purpose, containing hints for their guidance, which the young logicians never fail to act upon in a way which leaves her powerless to reprove (if she does not wish to have her own lessons quoted against her), and with a dismayed sense of failure. She eulogises generosity, and forthwith the boys steal some hot-house grapes from a neighbour with which to present her on her birthday. She gives them lessons on the duty of making others happy, and they try to please her by lighting a bonfire in the cellar; a proceeding which disperses her birthday party. She sends them out of the room with a lecture on being quiet when Uncle Harry has the toothache. 'Even the sound of a person talking is annoying to him,' she says. 'Then you's a baddy woman to stay in here an' keep a-talking all the whole time,' says the irrepressible Toddie, 'when it makes poor old Uncle Harry supper so. G'way.'

She gives them instruction on the duty of working for others, the moral of which is pointed by two small itinerant Italian musicians, who, she informs the children, with beautiful enthusiasm, are doubtless toiling for sick parents who are far away; the result of which lesson on the dignity of labour is, that the two young monkeys perambulate the streets with Uncle Harry's precious violin and a whistle; and earn nearly a dollar with which to buy him a horse and carriage, which they have been told he cannot afford to purchase. It is with a sorrowful heart that Budge complains in his evening devotions that he has 'been scolded again for tryin' to do somethin' real nice for other people;' and that Toddie expresses his opinion that 'Aunt Alish ought to be ashamed of herself;' adding a hope that she may be made so. Poor Aunt Alice is gradually beginning to understand, having arrived at the knowledge by a thorny path, how very little she really knows about the management of other people's children. She tries to find out from Budge why their uncle succeeds better with them than she does, and learns a lesson on the art of making other people happy in their way and not in ours, which she takes to heart, if we may judge by the buns and candy which are manufactured by two small cooks in the Burton establishment, not without many perils to life and property. Perhaps the creature most to be pitied during the visit is the dog Jerry, who suffers many things at the hands of the boys. At all events he seems to be the only rejoicing member of the family at their approaching departure. Aunt Alice begs for another day, in which they distinguish themselves by ascending a precipice to get her a fern as a parting gift. Fortunately a kind Providence watches over them, and nothing worse occurs than a sprained ankle for Toddie. They are returned comparatively safe and sound to their father and mother, for which mercy we should imagine Mrs Burton offered a devout thanksgiving.

The last chapter is devoted to a conversation in

which Mr Lawrence favours us with his views on the bringing up of children. Surely he is right when he says that 'love never faileth.'

We feel certain that, to those who have babies like Helen's to manage, and who have wit to read between the lines, these two little volumes will prove as instructive as they are amusing. We can accord them no higher praise.

TEA-CULTURE IN INDIA.

THE author of an anonymous tract printed in 1639, and obtainable gratis 'up one pair of stairs at the sign of the Anodyne Necklace, without Temple Bar,' rather anticipated events in describing tea to be the leaf of a little shrub growing plentifully in the East Indies. No Indian tea found its way to Europe at that time, when haters of innovation were beginning to complain that through drinking of tea Englishwomen were no longer equal to eating beef of a morning. It was not until 1833 that a Scotsman, bearing the historical name of Robert Bruce, discovered there were tea-drinkers in Assam, who brewed their beloved beverage from the leaves of a native tree growing to a height of forty and even sixty feet; of which a few plants and seeds were subsequently carried by his brother, Mr C. A. Bruce, to Calcutta, to excite a transient curiosity, and that was all.

Time, however, brought Mr C. A. Bruce his reward. In 1834 a committee was appointed to consider the question of introducing tea cultivation in British India, and a scientific party under Dr Nathaniel Wallich—a Danish gentleman, whose botanical industry had won him the post of Superintendent of the Botanical Gardens at Calcutta—was sent to explore the newly acquired province of Assam, and make special inquiry respecting the tea-growing there practised. The result was that the committee reported favourably as to the feasibility of cultivating tea in John Company's dominions, Mr Bruce being selected to superintend the formation of government nurseries; and with the aid of Chinese seeds, Chinese plants, and Chinese cultivators, he set the possibility of producing good tea in India beyond all doubt. One consequence of the happy experiment was the establishment in 1839 of the Assam Tea Company, which took over the greater portion of the government gardens, started new ones on a larger scale, set about the cultivation of tea in good earnest, and after various vicissitudes, is now a flourishing concern.

The profitable industry is now fairly established in several of the provinces of the Indian empire, but Assam still maintains its pride of place, being credited with one half of the tea produced; the tea districts of Cochin and Tibet supplying twenty-six per cent, Darjeeling thirteen per cent, the Himalayan districts six per cent, and British Burmah the remaining five per cent. Darjeeling prides itself upon the superior delicacy and aroma of its leaf; but the rough, pungent, malty flavoured product of Assam, which owes its character to the

use of native in place of Chinese seed, is the recognised standard Indian tea. If the Assam planters may congratulate themselves upon overcoming the old-time prejudice in favour of Chinese seed, they have equally good reason to rejoice at having found a way to dispense with Chinese labour, once a grievous necessity. By offering high wages and constant employment, they are able to tempt Bengalee coolies to leave their beloved villages, and by providing comfortable huts with garden-ground in which they can install their wives and families, insure their staying in their new home. That they may not be saddled with useless hands, the tea-growers employ native foremen familiar with the work to act as recruiting officers.

Twelve or thirteen years ago a violent tea-growing mania suddenly set in. Companies were formed by the dozen. The value of available land rose beyond all reason. Some unscrupulous schemers sold uncleared forest-lands as plantations; others, more unscrupulous still, obtained payment for plantations utterly non-existent in any shape, and genuine 'gardens' of forty acres fetched from twenty to thirty thousand pounds. Things have long since found their level again; but the possession of a tea-garden even now presupposes the possession of a capital of at least three thousand pounds, a smaller sum being deemed insufficient to start with, since no return is to be expected from a new plantation for the first three years, and it takes six years for the plants to attain maturity; then they will allow of eight or nine gatherings being made in a year, and yield four hundred pounds of leaves per acre. They improve with age; but planters of seedlings have little chance of seeing their trees at their best, if the Chinese and Japanese speak truly when they say the tea-tree lives to be five hundred years old, and grows better as it grows older.

For very many years after its introduction into England, tea was the subject of a double monopoly. The Chinese were the only manufacturers, the East India Company the only importers. The opening of the trade deprived the consumer of the benefit of the strict supervision exercised by the Company's agents, and left the Chinese merchants master of the situation. A deterioration in the quality of the teas sent into the English market quickly followed; and every reduction in the duty tended to the same end, by encouraging the importation of low-priced leaf of little use save to mix with that of better class; and so it is almost impossible to obtain at any price what those who can remember it call 'old-fashioned tea.' At a late meeting of the Indian section of the Society of Arts, Mr Burrell, after remarking that India produced tea superior to any in the world in flavour, strength, and purity, complained that it was rarely used in this country except to mix with the inferior growth of China; and urged his hearers in their own interests and as a duty they owed to their countrymen in India, who had long toiled and struggled to meet their wants, to a more direct and extended use of Indian tea, and thereby afford a fair harvest of profit to its cultivators, for which nothing was now wanting but an increased consumption of their produce in this country.

Mr Burrell, we think, should rather have appealed to the sellers of tea; for unless they bestir themselves in the matter, but few of the millions

of British tea-drinkers can have the chance of tasting pure Indian tea. We are aware that 'the trade' declare pure Indian teas unsuited to the national palate; but we have no faith in their judgment. If dealers in adulterable articles are to be believed, the British public's taste is a monstrously depraved one, preferring chicory to coffee, publican's to brewer's beer, turmeric and flour to mustard, and clever concoctions of all kinds to the things they pretend to be. It may be taken for granted that the Yankee vender of wooden nutmegs was ready to swear his customers preferred the ingenious imitation to the genuine article.

The tea-growers of India, however, have a hopeful prospect before them. The consumption of the produce of their gardens has risen prodigiously, since the arrival of eight chests of tea from Assam caused such a sensation in the London market that the importers obtained from sixteen to thirty-four shillings a pound for it, or an average per pound of twenty-four shillings and sixpence. In 1851 the exportation of Indian tea amounted to 262,839 pounds; by 1863 it had risen to two and a half million pounds; in 1876 English buyers were found for 23,126,100 pounds. Every year sees an increase in the consumption of Indian tea; and unless their Chinese competitors look to it, they will gradually be beaten out of the field, for India possesses vast reserves of land fit for conversion into tea-gardens, and could, if need be, supply the wants of the whole world.

PROFESSOR TYNDALL ON THE SPREAD OF DISEASE.

WE copy the following from our able contemporary, *Nature*. The views propounded have been already noticed in our paper on the 'Germ Theory.'

'In proposing a vote of thanks to Dr Corfield for his recent lecture on Infectious Diseases, Professor Tyndall paid a high compliment to the lecturer for the thoroughly sound instruction which he had so clearly conveyed. He had made it plain that contagion consisted, not of gas or vapour, but of definite particles, sometimes floating in gas, in the air we breathed, or in the water we drank; and that, like organic seeds in the soil, they multiplied themselves indefinitely in suitable media, the great probability being that these disease-producing particles were living things. A close study of the subject, extending now over several years, enabled him to agree entirely with the lecturer in the parallelism which he had declared to exist between the phenomena of contagious disease and the phenomena of ordinary putrefaction. The case of flies, for example, to which the lecturer ascribed the power of communicating disease from one person to another, was exactly paralleled by phenomena in putrefaction. Chop up a beefsteak, steep it in water, raise the temperature a little above the temperature of the blood, pour off the water, and filter it; you get a perfectly clear liquid; but that liquid placed in a bottle and exposed to the air soon begins to get turbid, and that turbid liquid, under the microscope, is found to be swarming with living organisms. By suitably heating this perfectly clear beef-tea, it can be sterilised, everything being killed which is capable of generating those little organisms which produce the turbidity; and by keeping it from coming in contact with the floating particles of the air, it might

be preserved transparent for years. He had now some sterilised beef-tea of this sort which had been preserved for eighteen months in a state of perfect transparency. But if a fly dipped its foot into an adjacent vessel containing some of the turbid fluid, and then into the transparent fluid, that contact would be sufficient to infect the sterilised infusion. In forty-eight hours the clear liquid would be swarming with these living organisms. The quantity of the turbid liquid which attaches itself to the finest needle-point suffices to infect any amount of the infusion, just as the vaccine lymph taken up on the point of a surgeon's lancet spreads disease through the whole body. Here, also, as in the case of contagious disease, there was a period of incubation. In proof of what the lecturer had stated that the contagion of these communicable diseases was not gaseous or liquid, but solid particles, he would describe an experiment he had made only a few weeks since. Eighteen months ago he had a chamber prepared from which all floating particles of dust were removed, and in it he placed a number of vessels containing animal and vegetable refuse which soon fell into putrefaction, and also two or three vessels containing perfectly clear beef-tea and mutton-broth, as transparent as water, in which the infective particles had been killed by heat. Although all these vessels had stood for eighteen months side by side there had been no communication of contagion from one to the other. The beef-tea and mutton-broth remained as transparent as when put in, though the other vessels emitted a most noisome stench. But if a bubble were produced in one of the putrefying masses by blowing into it, and if on rising to the surface and bursting the spray of the bubble was allowed to fall into the transparent beef-tea or mutton-broth, in two days it became as bad as its neighbours.

'Referring to another point on which the lecturer had insisted—namely, that there was no power of spontaneous generation of the germs or contagion of diseases, Professor Tyndall said that, though at present great names were opposed to that view, he would venture to predict that ten years hence there would be very few great names opposed to the lecturer on that matter. With regard to the power of specific contagia to be generated in decomposing animal matter, he would say that for the last twenty-one years he had been in the habit of visiting the upper Alpine valleys, where, amongst the Swiss chalets, there was the most abominable decomposition going on from day to day, and exceedingly bad smells, but there these contagious diseases were entirely unknown. If, however, a person suffering from typhoid fever were transported there, the disease would spread like wildfire from this infected focus, and probably take possession of the entire population. It might be taken, therefore, that any of these special diseases required its special germ or seed for its production, just as you required a grape-seed to produce a vine. He entirely agreed with all that Dr Corfield had stated as to these diseases 'breeding true.' He never found the virus of small-pox producing typhoid, or *vice versa*. The subject was one of the most important which could engage the attention of the scientific physician.'

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FOREIGNERS' ENGLISH.

At all the tourist-towns abroad British visitors are much looked for; and it is amusing to see the mode in which inscriptions and advertisements are drawn up in English, or what is supposed to be English, for the sake of riveting the attention of possible guests or customers belonging to the 'nation of shopkeepers.' Many tourists have taken copies of these curiosities, which have afterwards found their way into print in various forms.

Hotels are famous for these curiosities: the variety of languages spoken by the visitors supplying a reason for this. The 'Drei Mohren' (Three Moors) hotel at Augsburg has the following entry in the visitors' book: 'January 28th, 1815; His Grace Arthur Wellesley, &c. &c. &c.; great honour arrived at the beginning of this year to the three Moors; this illustrious warrior, whose glorious achievements, which, cradled in India, have filled Europe with his renown, descended in it.' At the 'Trois Allies' hotel, Salzburg, some few years ago, mine host invited English visitors by the following announcement: 'George Nelböck begs leave to recommend his hotel to the Three Allied, situated vis-a-vis of the birth-home of Mozart, which offers all comforts to the meanest changes.' The prepositions *at* and *to* are great stumbling-blocks to such concoctors of English sentences and phrases; the pronouns *which* and *who* not much less so. An hotel-keeper at Rastadt bestowed great pains on an announcement which with many others was exhibited in the entrance passage or hall: 'The underwritten has the honor of informing the public that he has made the acquisition of the hotel to the Savage, well situated in the middle of this city. He shall endeavor to do all duties which gentlemen travellers can justly expect; and invites them to please to convince themselves of it by their kind lodgings at his house'—signed 'Basil Singism, before the tenant of the hotel to the Stork in this city.' If the good man had hit upon 'Savage Hotel' and 'Stork Hotel' he would have been a little more intelligible.

The circular of an Italian host, printed in four

languages, discourses thus to English visitors concerning the excellences of the hotel 'Torre di Londra, Verona: 'The old inn of London's Tower, placed among the more agreeable situation of Verona's course, belonging at Sir Theodosius Trianoni, restor'd by the decorum most indigent to good things, of life's cases; which are favored from every acts liable at inn same, with all object that is concerned, convenience of stage coaches, proper horses, but good forages, and coach houses. Do offers at innkeeper the constant hope, to be honored from a great concourse, where politeness, good genius of meats, round table, coffee-house, hackney coach, men servant of place, swiftness of service, and moderation of prices, shall arrive to accomplish in Him all satisfaction, and at Sirs, who will do the favor honoring him with a very assur'd kindness.' No doubt 'Sir Theodosius' took some pride in this composition.

The card of an old inn at Paris some years ago contained the announcement, 'Salines baths at every o'clock;' and of another, 'The wines shall leave you nothing to hope for.' In an hotel at Mount Sinai, on the fly-leaf of the visitors' book, English travellers are informed that 'Here in too were inscribed all whose in the rule of the year come from different parts, different cities and countries, pilgrims and travellers of any different rank and religion or profession, for advice and notice thereof to their posterity, and even also in our own of memory, acknowledging.'

On one of the slopes of Mount Etna, at a height of more than nine thousand feet above the sea, is a house built of lava, containing three small rooms and a shed for mules. Up to that point tourists and explorers can ascend on mules, but the remainder of the climb must be made on foot. Hence the desirability of having some building in which mules and muleteers may sojourn for a time, while their hirers or employers are wending their laborious way up to the volcanic summit. When an English force occupied Sicily in 1811, the three brothers Gemmellaro, the most indefatigable of explorers and describers of Etna, obtained from the commanding officer the aid of some of

the soldiers (probably sappers and miners) in building the lava house above adverted to; giving it, in compliment, the name *Casa degli Inglesi* or 'English House.' Provided with a few humble pieces of furniture, it is placed at the service of visitors, who must bring their own food and fuel with them, and bedding if they wish to pass a night there. The key is kept at a house at the foot of the mountain, the residence (late if not even now) of a member of the Gemmellaro family; it must be applied for when required, and returned when done with, accompanied by a signed certificate declaring that the liberal accommodation has not been abused. Printed notices are hung on the walls of the casa in various languages; one of which, in English, informs English-speaking visitors that 'In consequence of the damage suffered in the house called English, set on the Etna, for the reprehensible conduct of some persons there recovered, certain regulations are laid down. Visitors, when applying for the key, must give name, title, and country, and must at the same time 'tell the guide's and muleter's names, just to drive away those who have been so rough to spoil the movables and destroy the stables. It is not permitted to any body to put mules into rooms destined for the use of people, notwithstanding the insufficiency of stables. It is forbidden likewise to dirty the walls with pencil or coal. M. Gemmellaro will provide a blank book for those learned people curious to write their observations. A particular care must be taken for the movables settled in the house. . . . Persons neglecting to execute the above articles will be severely punished, and are obliged to pay damage and expenses.' A significant hint winds up the announcement: 'It is likewise proper and just to reward M. Gemmellaro for the expense of movables and for the advantages travellers may get to examine the Volcan.'

As English travellers will go whithersoever there is anything to be seen, hotel-keepers look out for them near buried cities as well as near volcanic mountains. The following was copied by a tourist from a card for English visitors, prepared by the host of an establishment at or near the excavations of Pompeii: 'That hotel, open since a very few days, is renowned for the cleanliness of the apartments and linen; for the exactness of the service; and for the excellence of the true French cookery. Being situated at proximity of that regeneration, it will be propitious to receive families whatever, which will desire to reside alternately in that town, to visit the monuments new found, and to breathe thither the salubrity of the air. That establishment will avoid to all travellers, visitors of that sepulchral city, and to the artists (willing draw the antiquities) a great discordance, occasioned by the tarty and expensive contour of the iron way. People will find equally thither, a complete sortiment of stranger wines, and of the kingdom, hot and cold baths, stables and coach-houses, the whole with very moderate price. Now, all the applications and endeavors of the hosts will tend always to correspond to the tastes and desires of their customers, which will acquire without doubt to him, in that town, the reputation whom he is ambitious.' The landlord's meaning is pretty clear, in spite of his funny English, save in relation to 'the tarty and expensive contour of the iron way,' which however, may have a vague reference to railways.

A refreshment house at Amsterdam sells 'upright English ginger-beer'—the Dutch word for 'genuine,' *oprecht*, having led to a muddling of the English.

Shopkeepers will naturally be as desirous as hotel-keepers to draw the attention of possible customers who are more likely to read English than any other language. A firm at Marseilles, claiming a good repute for their preparation of the liqueur called *Vermuth*, have labels on some of their bottles to the following effect: 'The Vermouth is a brightly bitter and perfumed with additional and good vegetable white wine. This is tonic, stimulant, febrifuge, and costive drinking, mixed with water it is aperitive, refreshing, and also a powerful preservative of fevers; those latter are very usual in warmth countries, and of course that liquor has just been particularly made up for that occasion.' It is quite certain that M. Lapresté, a restaurateur at Versailles, said exactly what he did not mean in the following announcement; by confounding the French *prévenir* with the English *prevent*: 'To Rendezvous of Museum, Arms Place, 9, Lapresté Restorer, has the honor of preventing the travellers that they will be helped at his house, or a head, or at choice.' The original may usefully be given here, to shew how perplexed the host must have been in his attempted translation: 'An Rendez-vous du Musée, Place d'Armes, 9, Lapresté, Restaurant, à l'honneur de prévenir MM. les voyageurs, qu'on est servi, chez lui, à la carte ou par tête, au choix.' At Rouen an announcement is remarkable for the odd way of expressing 'London Stout'—namely, 'Stoughtonlondon.' A bath-keeper at Basle informs his English visitors that 'In this new erected establishment, which the Owner recommends best to all foreigners, are to have ordinary and artful baths, russia and sulphury bagnios, pumpings, artful mineral waters, gause lemonads, furnished apartments for patients.' A French advertisement relating to a house to be let, with immediate possession, takes this extraordinary form: 'Castle to praise, presently.' Those who know the twofold meaning of the verb *lower* in French will see how this odd blunder arose. A dentist at Honfleur 'renders himself to the habitations of these which honor him with their confidence and executes all wich concerns his profession with skill and vivacity.'

At Frankfort-on-the-Main, 'M. Rentlinger takes leave to recommande his well-furnished magazin of all kind of travelling-luggage and saddle-work.' Affixed to a pillar outside the Théâtre Français, some years ago, was a bill or placard: 'Hardy Cook, living to the Louvre on the West Gate under the Vestibule, old emplacement of late M. Kolliker. He will serve you with list, and he has parlours and privates rooms, receives Society, and has always some Showeroute and Distors of Canell.' Inscrutable words these last, certainly. At Havre, local regulations for the convenience of visitors are printed in various languages; English people are informed that 'One arrangement can make with the pilot for the walking with roars.' 'Pilot' for 'guide' is not far amiss; but 'roars' as an English equivalent for 'ramparts' (if that is meant) is odd enough; and if not, the enigma is just as formidable. The much-used French *on* evidently increased the difficulty of the poor translator.

A Guide to Amsterdam was published in Holland,

in English, some years ago; professing to be written, edited, or translated by an Englishman. Its style may be judged from the following specimen, relating to the manners and customs of many of the inhabitants on Sundays and holidays: 'They go to walk outside the town gates; after this walk they hasten to free public play gardens, where wine, thea, &c. is sold. Neither the mobility remains idle at these entertainments. Every one invites his damsel, and joyously they enter play gardens of a little less brilliancy than the former. There, at the crying sound of an instrument that rents the ear, accompanied by the delightful handle-organs and the rustic triangle, their devoirs are paid to Tersipho. Everywhere a similitude of talents; the dancing outdoes not the music.'

A Dutch volume containing many views in the Netherlands, with descriptions in three or four languages, claims credit for 'the exactness as have observed in conforming our draughts to the originals; which (a hope is expressed) cannot fail to join us the general applause.' Of one village we are told, 'That village was renowned by the abandon of sauntons that were fished there. That village is situated in a territory that afford abandon of fruits and corns.'

A small guide-book for English visitors to Milan cathedral is prefaced by the statement that, 'In presenting to the learned and intelligent publick this new and brief description of the cathedral of Milan, I must apprise that I do not mean to emulate with the works already existing of infinite merit for the notions they contain, and the perspicuity with which they are exposed.'

FROM DAWN TO SUNSET.

PART I.

CHAPTER THE FOURTH.

'FATHER, where do you go away all day?' It was Charlie who spoke, clambering on his father's knee.

'I drive the coach, boy.'

'Coach? An' what is that?'

'Goodsooth, boy, thou hast seen a coach?'

'Ay, father—the coach an' four horses that runs to Grantham. You do not drive a thing like that?'

'Ay. And why not?'

The boy blushed scarlet. 'Why, father, you are Sir Vincent Fleming.'

'An' what o' that?'

'Then is it not against your pride to be a coachman?'

'Poor men must pocket pride, Master Charlie, as thou must learn some day.'

'Well, father, I like it not. Are you so poor, dear heart?'

'Ay, sweet heart, am I.'

'What makes ye so poor?'

'Ill luck, Master Charlie.'

'What in, is your ill luck, father?'

'In all things.'

'Dear heart alive, I'm sorry for ye! When I'm a man, father, you shall go no more a-coaching; I will work for you.'

'Ay, ey, my brave dear lad. I coach to win ye bread. We're poorer than the world thinks. But tell them not this, Master Charlie, or they will dun me.'

'Then I'll dun them!' cried the boy fiercely. 'I

hate those bailiff fellows; if they come here, I'll shoot 'em!'

'We'll fight 'em together, boy. See that thou never hast the bailiffs at thy heels. Here is Deb, Lady Deb by courtesy. Mistress, my rose, say good-morning to me.'

But Deborah was already in her father's arms.

'Deb,' cries Charlie, 'father drives a coach!' Then seeing Deborah's round eyes: 'Now don't you slack, Deb; don't you go an' tell it to all the world, else they will dun father.'

'O me!' Then Deborah's eyes flashed. 'That they shall not—never again! But I tell you, father; I will coach beside you, and try to drive the four brave horses! I will not let you work alone!' Deborah's arms were round her father's neck; she showered kisses on his face.

'Off with ye!' cried Charlie, somewhat fiercely.

'You know that if any one should coach with father, I should—not a baby like to you.'

'Hush,' said Sir Vincent, laughing. 'Thou art ever ready to fight. I have spoiled ye both sadly; so Master Vicar tells me. But Deb, I cannot have thee to help me, little one. Get Dame Marjory to teach thee all the ins and outs of household work, and to trick thyself out bravely, so thou wilt be thy father's pride, my rose of Enderby!'

But Deborah laid her head on her father's breast, caressing him. 'Father, you love Charlie best—Charlie is your darling.'

'Who told thee so, sweet heart?'

'My own heart.'

'Dost love me best, father?' asked Charlie; he pushed his curly head up on to his father's shoulder, and looked up with arch eyes into his face.

Sir Vincent gazed at him. Ay, the father's rose lay upon his heart, his 'Lady Deb,' his darling; but that willful rogue, that youthful inheritor of all his own wild freaks and follies, that young ne'er-do-weel, Charles Stuart Fleming, the plague of Enderby, was his own soul, the idol of his darkened life. Sir Vincent pushed him roughly away, and laid his hand on Deborah's fair hair. 'Love thee better? No; thou graceless rogue!' he said. 'I love thee both alike. Sweet Deb, thou art my darling too. Now be off with you both; and see that there is no more gipsying or ruffling it while I am away; for Jordan Dinnage shall have orders, if you disobey, to flog ye both with the rope's end; for nought but that, I fear me, will curb the villainy of either one. Good-bye, sweet hearts, an' see that ye stir not beyond the gates.'

The gipsies had vanished from that part of the country; not a trace of them was left; for they knew Sir Vincent Fleming well, and fled betimes. But Sir Vincent had not been gone three hours, when the restless roving Charlie was scouring round the park on his pony, and longing for some fresh adventure and wider bounds. Deborah and little Meg Dinnage were running after him, and urging on the pony with many a whoop and yell, with torn frocks and streaming hair.

'Deb,' cried the boy at last, pulling up, 'I am sick o' this. I am goin' to ride to Clarges Wood, to look for Will; I shall cut across yonder.'

'But you must not!' exclaimed Deborah; 'you have promised father not to go beyond the gate.'

'I have never promised that,' said Charlie hotly;

'father asked me no promise, an' I gave none. It is nothing o' the sort.'

'Nathless it was a promise,' quoth little Deborah stoutly, glancing from Charlie to Meg Dinnage, and back in distress; 'for we said nought when father said: "An' see you stir not beyond the gates;" but I kissed him, an' I said: "I will not."'

'You did not say that, silly!'

'Nay, but to my own self I said it. Father has trusted us; so Dame Marjory says.'

'I care not for Dame Marjory. I gave no promise; nor am I afraid of a rope's end. If Jordan Dinnage beat me black an' blue, I'll go! But I'll not see Jordan till father comes home. Father loves me too well to have me flogged when he is by; and with a laugh, Charlie turned his pony's head; but Deborah sprang after and caught the rein. 'Charlie, Charlie, stay!' she cried; 'father has trusted you to stay!'

But Charlie was across the boundary and far away; his laughter echoed back. Deborah flushed, the tears almost started as she gazed after him, but she kept them proudly back. Little Mistress Dinnage went up to her playmate and took her hand ('Mistress Dinnage,' as she was called for her little upstart ways and proud independence) and eyed Deborah curiously. 'Don't cry,' said she. 'Cry!' echoed Deborah scornfully; 'I'm not cryin'.'

'He's a bad boy,' said Mistress Dinnage gravely, with a nod of her head that way.

Deborah half rebelled at that, then: 'Charlie has broken his word!' and she flushed again. 'God will never love Charlie. The evil one will take Charlie to the bad place; and the bright eyes glistened, but again the tears were stifled back.

'Not if my dad beats him,' said Mistress Dinnage consolingly; 'then he will be a good boy, and God will love him again.'

Deborah shook her head. 'Ah, Charlie will only be bad the more. He laughs at Master Vicar, and cares for nought. But don't tell your father, Meg, that Charlie's gone away; he will not be good the more for that; God will not love him better. Charlie must himself tell father, and that will make it right. So see that you don't tell Jordan, dear, for I am afraid to see my brave one beat; I had rather have Jordan beat me than him; it makes me *fear* to see Charlie beat.'

'An' me too,' said Mistress Dinnage, with infinite relief. 'We will not tell on Charlie; Charlie would call us "Sneak." Come an' play.'

And the two, putting aside their sorrows, cast care to the winds and danced away.

CHAPTER THE FIFTH.

A year or two have passed and there was joy in the bells of Enderby, and joy in the sun and flowers. Winter and summer, storm and sun, how sweetly the days fled by—the wild sweet days of childhood. The streams; the dark green woods; the blue and cloud-swept skies; the clear lagoons; the carol of birds in the gay early morning from wood and field and holt; the father's call beneath the window, and then the long, long sun-bright day; the games; the 'make-believes'; tracking the wild Indians in the forest, hunting the chamois on the mountains—happy days, these!

Time passed on; Charlie was alternately sent to a public school and to a private tutor; he was expelled from the former, and ran away from

the latter. 'The tender, but proud and stubborn heart was never reached; so the dogged will and headstrong passions remained uncured and uncontrolled, and Charlie Fleming too surely went from bad to worse. Three distracted governesses in succession gave up Lady Deb; their reigns were short and eventful.

Upon a certain day stood Deborah Fleming, watching for Charlie's coming. For a week past Charlie had daily ridden over to the neighbouring university town to 'read' with his cousin Kingston Fleming, who had just entered there, and being somewhat of the same stamp as himself, imagine how much 'reading' was accomplished! The lads came and went at all hours; sometimes at Enderby, sometimes away. To-day they were late. Deborah was weary. She wandered into the garden, between the high sunny walls, and threw herself on the warm grass amongst the daisies; she plucked a daisy idly, and grew intent over it, filiping away the leaves: 'He loves me, he loves not me!' and so forth. While thus musing, a tall fair youth, with a face browned by sun and wind, stole behind her, his whole countenance brimming over with merriment. Deborah instinctively turned her head. All her heart's blood rushed over her face, and her gray eyes flamed and dilated like a stag at bay; for one moment she glared at the youth, and then, before he could speak, was up and away. A peal of laughter followed her as she fled.

'Hi! what's the matter, King?' cried Charlie Fleming, swaggering up in his riding-gear. 'What is the cause of this immoderate laughter? Deb has flamed by me like a whirlwind; I tried to catch her.'

Still, for some moments, Kingston Fleming shouted with uncontrollable mirth, rolling on the grass. When he could speak, he said: 'You will never guess, Charlie! Yet it is a shame to tell you. And yet it is too rare a joke to keep! *Little Deb hath got a lover!*' And with that, Kingston went off again.

'I came up unawares,' said he, 'an' my Lady Deb sat on the grass. "He loves me, he loves not me!" she said; not like Deb proud and haughty, but quite tender and subdued over it. She turned and saw me. Egad! how she blushed, and what a glare! Poor little Deb, she was distraught for shame and anger. I was a brute to laugh!'

'I will roast her,' said Charlie. 'Deb a *lover*? Ha, ha, ha!'

'No; you shall not speak of it,' said Kingston, laying a heavy hand on Charlie's shoulder. 'On peril of your life, you shall not.'

Charlie laughed. 'Under that threat I must succumb. Perchance Deb has a sneaking liking for you, old King!'

'For me?' And Kingston had a fresh fit of laughter. 'Nay; Deb hates me like poison, and I think her the maddest little fury that ever stepped. Deb and I shall ne'er run together.'

But as for the maiden, she fled to her room like a little tempest, and lay along the floor half dead for shame. She could scarcely think, for when she thought, the blood rushed in eddying torrents to her head, and made her mad for anger and for shame; for more than aught on earth, was Deb shy of the dawn of love and Kingston's railery. All day she kept her room. She watched from behind the curtains Kingston and Charlie ride away; she

had not kissed Charlie that day or spoken to him; she heard him call out 'Good-bye, Deb.' Then he would not return that night. O Charlie, Charlie! And then she peered out, and heard Kingston's laugh, and saw his fair hair blown by the wind. The girl leaned out and watched them through the gateway. 'I love him,' she said to herself with mingled fire and softness; 'I love Kingston. But he will love me never—never!'

Kingston laughed no more about Deborah's daisy: he was generous. The next day he was teasing, laughing, tormenting about a hundred things; and the child Deborah was chaffering and defying him in the wildest animal spirits. Dame Marjory shook her head; there was such a flying, scurrying, shouting, and such peals of laughter, not only from those three, but from the usually demure Mistress Dinnage who joined them, that the Dame could make nothing of them; they got worse and worse. Kingston Fleming was a wild youth, not one indeed calculated to steady his kinsman Charlie. Yet Kingston had good, and even noble impulses in those days: he was ambitious too; and at odd hours and by fits and starts, he worked hard, with the idea of fulfilling those ambitious dreams. But Charlie never worked at all: his dreams, if he had any, were not known. Himself caring little for any man, who cared for Charlie? Why, all who knew him loved him; they could scarce tell why. Old Jordan Dinnage, who had given him many a rough hiding, idolised the boy; young Margaret Dinnage, who had received many a rough word from him—well, young 'Mistress Dinnage' did deign to open the gates to Charlie Fleming's horse, though she would do so with a toss of her head and an assumed air of disdain. This maiden resented even then, though still a child in years, the full-blown compliments of the lad Kingston; but would reddens, and her dark eyes would glow, when the boys passed by, if she only met the swift, shamed, furtive glance from two full red-brown eyes—the eyes of Charles Fleming.

On sunny mornings, when the lads rode unexpectedly into the courtyard of Enderby, there would be a whirr-r-r of pigeons, lighting on the gabled roof; a blaze of sunshine on the great wych-elm; a murmur of bees; a smell of fruit and flowers; white-haired Sir Vincent standing in a stable-door; over the garden wall, Deborah and Margaret flying along the garden walk with arms linked in the 'maddest merriest dance'; set to the music of boisterous laughter. Those were happy days.

PART II.—NOON.

CHAPTER THE FIRST.

'Hath he gone, Lady Deb? Hath Finton gone?' It was Dame Marjory who spoke, treading cautiously as she entered the young mistress's presence.

Deborah tossed her head, and gave a short laugh. 'Ay,' he blustered, though. It is the third time he has come to dun father. My dame, these are hard times; but all may yet be well. Look you, I have saved so much for father; if Finton could see it, how his eyes would glitter like a wolf's. I hate that man; I hate all money-hunters. I care not if it be the law or not; it is

dirty work! Take you this gold, dame; hide it well, lest I covet to buy a new gay scarf like Mistress Dinnage's. Away with it! and let me see the stuff no more.'

Dame Marjory took the gold, but she looked back over her shoulder, and her old eyes gleamed: 'Thou to want for what Jordan's daughter has for askin'!' she said. 'What right has Mistress Dinnage to flaunt in silken scarfs—and my child, my mistress, my lady "rose o' Enderby" to pine and pine? My child!—and the old woman faced Deborah, and the hot fierce tears welled into her eyes.—I was wont to dress thee better than a queen; now look at thy dress! What right, what call hath Sir Vincent Fleming's daughter to wear such dress as this? A gipsy hag would scorn it! An' thy poor mother would have cursed the day that saw thee in this strait!'

'Hush, Marjory—hush!'

'I will not hush! It is thy father's an' thy brother's sin. I will not hush! O child, child, my heart is harried for thee!' And the old woman fell from her vehemence, and began to weep most bitterly.

Deborah softened at that; she flew to her nurse's side in wonderment, and kneeled at her feet in tender trouble. 'I dare, dame!' she said, 'it is not thy habit to give way to tears—and all for me, for me, dear dame, who am not worthy to have thee shed a tear! Harken! Do you think I care to flaunt in silks? Do you think indeed Sir Vincent Fleming's daughter would wear fine feathers while he owed a penny? You might then weep for shame. But I am too proud for that. Now kiss me; and do not weep, oldest, truest friend. I cannot have thee weep!' Impossible to describe the tenderness of tone in those last words. Some thought Deborah Fleming cold, hard, haughty; they would not have thought so then.

Left alone, the girl resumed her gay debonaire air. She gazed at herself in one of the long mirrors; she smiled and courted low, in mockery; then drawing herself up, she gazed again. Now Deborah would utter her thoughts aloud; it was a way she had. Regarding herself, she said: 'Nay; you are not fit; you cut a sorry figure in the world. She says truly. Yet what would you have me do? Beg borrowed plumes! Use ill-gotten gains! Would Deborah Fleming be the fairer for that? The fairer, perchance, but not the nobler. Oh, you are a sorry bird, Deb! The old barn-hen has a richer dress than you.' Then again, jerking her head upward once, twice, thrice: 'No wonder Kingston Fleming does not love you. "Master Kingston Fleming!" she added—and her lip curled with superb scorn—'loves fine dresses and silk shoes. He loves to see "beauty go beautifully." I am not a "Mistress May" or "Misses Blancheflower." With that, Deborah shot off all her satire; and laughing, tripped from the room.

In a few moments more she was running with the fleet foot of her childhood across meadow and holt, gay as a skylark. Presently she stopped, for in her course, with her back to a tree, stood a tall gipsy woman, with a red and yellow scarf upon her head. 'What do you here?' asked Deborah haughtily. The old scene in the camp came back; the fugitive retreat at night; she and Charlie and the old beldam huddled in a covered cart together;

and outside, the tramp, tramp of horses and of men, and the mysterious jingle of pots and kettles, and the angry blows received from the old beldam for the noise she and Charlie made. The gipsy too recognised Deborah: this was not the child, though, who eyed her through the gate, but a proud imperious lady. In spite of the plain rough dress, the woman, with the nice discernment of a peasant and a gipsy, knew the lady, and the Lady of Enderby to boot. With unabashed impudence the gipsy stepped forward: 'I was waitin' to see ye, pretty lady.'

'And what do you want with me?' asked Deborah. 'This place is not for such as you. Honest poor folk may seek me here, and welcome; not gipsy vagabonds and thieves. If you have a petition, refer it to the back door and the cook, not to Mistress Fleming.'

The woman turned aside her head; for the moment her dark face was distorted by impotent rage and passion; but when again turned on Deborah, it was calm. She darted forward and clasped her hands, for Deborah was passing on.

'I am no thief,' said the woman, with shortened breath. 'I am an honest woman, lady, an' honestest than many folk that live in great houses, like yonder. Pretty lady, don't be so hard on the poor gipsy. I've had troubles I tell ye, to which yours are nought—an' I don't ask yer pity.'

'Then what do you ask?' asked Deborah, turning full upon her.

'Yer hand—to let me see yer hand!'
'For the sake of gold! I have no gold to give you.'

'Nay, for no gold,' said the woman eagerly; 'but to read yer fate. A silver piece will do it. There! I will tell ye yer fortune for that.'

'And to what end? Have you an interest in me? in one whom you would have gladly lured away to a life of sin and misery? or as a hostage for my father's gold? You have done me grievous wrong. You take too much heed by half to the interests of the Flemings, woman; it is for no good.'

'Yes,' said the gipsy, in a strange low tone, 'I take interest in ye, but *more* in yours. Lady, let me see yer hand. I tell ye I have interest in yer fate, and in the fate o' one yer soul loves. Come!'

'You shall not wheedle me into it,' said Deborah. 'If I consent to let you, it will be of mine own free-will and after thought, not from words of yours. Some tell me it is vain; some say that fortune-telling sells you to the evil one—that it is grievous sin to seek your fate by signs and stars. I am not of these opinions.' The girl seemed talking to herself; the gipsy watched her keenly.

'Yes,' said Deborah, looking up and full at her, 'you shall tell my fortune. But can you trust me for the money?'

'Yes.'

'And why?'

'Because ye can't tell a lie.'

'That is well. I believe in witchcraft; this is why I hear you. Had you not come here, I would sooner or later have sought you, because time is slow, I am slow, woman, and I want to know my fate! I will not say God forgive me: it seems almost mockery to ask forgiveness on what my heart knows to be wrong.'

'Wrong, lady?'

'Yes, wrong!' cried the maid, striking her foot

on the ground. With that she held out her hand, a pink palm and tender lines, for the witch-woman's mystic reading. They both stood silent—the gipsy gazing downwards; Deborah gazing on the weird countenance before her, while the rich blood spread and deepened on her own with timidity and with shame. 'What do you see?' asked Deborah at length, with curling lip. 'I scarce believe you; it seems too vain!'

Then answered the gipsy woman, in low strange tones: 'You will be a great lady yet—ay, greater than Mistress Fleming. Ye will not go far to find yer greatness, either—it will meet ye at yer own gates; love and greatness will come hand in hand.'

Deborah's eyes sparkled. Then she said: 'Woman, that cannot be! Then with the blood mounting to her brow like flame: 'What did you say—of one whom my soul loves? Who is he?'

'A fair tall youth. I know his title; but the title, look ye, will never be yours.'

'Then I care for nought!' said Deborah Fleming, and she flung away the gipsy's hand. 'Your craft is wanting. It is a vain, lying, deceitful craft! Look ye, Deborah Fleming will never be your great man's wife! You lie! I love power and riches; but I scorn them as you would foretell them to me. Gipsy, I have had enough of your fortunes and of you!'

She was gone—that proud young Mistress Fleming, whose will had never been crossed or curbed; tall beautiful young ash, that would yield neither to breeze nor tempest, but held its head so high.

The gipsy gazed after her; fierce passions made the woman's breast pant. 'I hate her!' she gasped between her clenched teeth—'I hate her! I hate all thy black race, my lass. But ye shall lick the dust, proud Mistress—I see it on yer palm. Ye shall have the pale-faced sweetheart, but it shall be across ruin and disgrace; an' ye settin' yer foot on the two dead bodies o' them ye love like yer own soul, ye shall climb to yer lad. Take him! I wish ye joy o' him then! I care not, so long as I ha' vengeance, vengeance, vengeance!' and the wild woman's eyes glared with a fire like madness. She turned towards Enderby, and shook her clenched fist that way. 'I will have vengeance then, for all the dark hours thou hast caused me, pretty daughter o' mine! I will see thy boy dabbled in his blood; an' may thy dead eyes be opened to see it too. Heaven's malediction light on thee!'

THE ROYAL NAVAL RESERVE AND ROYAL NAVAL VOLUNTEERS.

WHENEVER England is engaged in a naval war or any war including maritime operations on an extensive scale, a difficult problem has to be solved—how to man the ships? In the army, every regiment has a sort of corporate existence; it never dies—the exceptions, the actual disbandment of a regiment, being very rare indeed. The number of men varies according to the peace-footing or the war-footing at which the regiment may stand at any particular date; but at all times many hundreds of trained men belong to it. Not so in regard to a ship of war. When not wanted for warlike, cruising, or other service, it is 'out of commission;' all the officers and men are

paid off; and the ship, moored at Portsmouth or some other naval station, is stripped of most of its paraphernalia, ammunition, and stores, and 'laid up in ordinary' with a few dockyard or harbour men to take care of it. When wanted again for active service, it has to be 'put in commission' again; commissioned officers and crew have alike to be engaged anew, just as though the ship were fresh from the builder's hands. Officers are always plentiful enough, the number on half-pay in peace-time being very large—nearly the whole of them desirous of engaging in active service on full pay. With the sailors, the A.B. (able-bodied) and common seamen, the case is different; competition for their services being kept up by the owners of large commercial vessels.

The difficulty of suddenly obtaining a large additional number of seamen was seriously felt at the commencement of the Crimean war; but the Admiralty solved the perplexity by organising a *Royal Naval Reserve*, and obtained the sanction of parliament for the necessary outlay. The Reserve was to comprise men who, provided they attend drill a certain number of days in each year, may follow any avocation they please at other times; it being a well-understood matter of agreement that they shall be ready for active service on the breaking out of war. Of course ship-owners did not at first relish this scheme, seeing that it established a new kind of competition against them for hands; but in practice no particular inconvenience has resulted. The men are permitted to take their drill whenever it best suits them; twenty-eight days per year all at one time, or in periods of seven, fourteen, or twenty-one days. Certain qualifications are insisted on before enrolment, including a medical examination in regard to health. The 'retainer' which the seaman receives, and the prospect of pension, operate as inducements to steadiness and against desertion; and it is known that this is exercising a beneficial effect on the mercantile marine, seeing that ship-owners now give a preference to Royal Naval Reserve men whenever they can get them. Mixing with the regular men-of-war's men during the one month's drill is also found to be beneficial; and some of the Reserve go through all their exercises with as much steadiness as a regular crew. The Admiralty are empowered by parliament to engage thirty thousand men in this way; the Reserve now comprises twenty thousand; and it is believed that there would be no great difficulty in making up the full complement.

In a recently published Report by the Admiral Superintendent of the body, the following remarks occur: 'After all the expense the country has been put to, and will have to bear prospectively, for the organisation and maintenance of the Royal Naval Reserve, will the men be forthcoming when wanted? This can only be tested in the day of trial, when the Queen's Proclamation will call the Reserve out for active service; but I hold that we have as reliable guarantees that the men will present themselves, as under any system that could be devised on the basis of voluntary service. The men have entered on an engagement to serve, they have received drill-pay and retainers under this engagement, and without being branded by public opinion, could not shrink from the fulfilment of their duty. It would be doing an injustice to

the *élite* of the merchant service to suppose that they are entirely devoid of patriotism, and would not desire to serve in defence of their country. Their prejudices against service in the royal navy have been in a great measure removed; and they would feel themselves competent from previous training to work the guns and handle a rifle and cutlass.'

Very little has yet been done to take the Reserve on a cruise for rehearsal or practice. A merchant seaman, to fit him for the Reserve, requires chiefly to be made familiar with the great-gun exercise, to handle the sword and rifle, to be steady and silent under instruction, and to obey implicitly the orders he receives. This training he will receive on board the drill-ships especially set apart for the purpose, or at batteries representing the section of a ship, quite as well as in a man-of-war. The Reserve has the first class (for the force is divided into classes) have already been seamen in the merchant service, and do not require instruction in seamanship.

The drill-ships and the practice-batteries are distributed pretty well around the coasts of the United Kingdom at about forty different stations—eight in Scotland, seven in Ireland, and the rest in England and Wales. There are nearly always some men on drill at every ship and battery; but it is noteworthy that in the fishing season in certain parts of Scotland and in the lakes the drill is pretty nearly in abeyance—herrings being more important just then than big guns and cutlasses. The first-class men are far more numerous than the second, showing that the main body are already fairly good seamen before they enter the Reserve. As to numbers in different places, the drill-ships near busy ports are naturally more frequented than those off a thinly populated coast. The *President* in the Thames, the *Eagle* at Liverpool, the *Unicorn* at Dundee, the *Nelley* at Inverness, the *Castor* at North Shields, the *Dadatus* at Bristol, are among the drill-ships which receive the greatest number of enrolled men for drill during the year. Liverpool takes the lead in the number of outsiders (seven-eighths of whom, however, are already merchant seamen) who apply for enrolment. Half the whole number in the force are under thirty years of age, young men with plenty of health and strength in them. Rather less than half are at home or in the coasting-trade; rather more than half voyaging in foreign seas, mostly, however, on short voyages that will end within a month. More of these voyages are to the Baltic and the North Sea than to any other waters; the next in numbers are those to the Mediterranean and the Black Sea.

The officers who command or control the body comprise lieutenants, sub-lieutenants, engineers, assistant-engineers, and midshipmen. The lieutenants must have served as sub-lieutenants one year or upwards; most of them have been duly qualified masters of merchant-ships. Midshipmen are promoted to the rank of sub-lieutenant on the fulfilment of prescribed conditions as to efficiency, &c.

The men of the first-class now receive a grant of a suit of clothing on enrolment and re-enrolment—an arrangement which they much relish, as an improvement on the plan at first adopted, when each man was left to dress pretty much at random, provided he looked something like a sailor. Nearly all the A.B.s in the mercantile marine have joined

or offered to join the body; thus affording proof that it is popular. The second-class Reserve are mostly fishermen, who are unacquainted with square-rigged vessels, and are unaccustomed to long absence from their homes; but they are fitted for coast-defence service. In Scotland and especially in the Shetlands, the second-class serves as a stepping-stone to the first. Their pay is less than that of the first-class, and they have no claim for pension; therefore they have an inducement to try for promotion. The authorities have had under consideration the question whether to establish a third-class, to consist of boys belonging to the mercantile training-ships; but no decision appears at present to have been arrived at.

In a discussion which took place at the Royal United Service Institution some time back, it was generally admitted that our band of hardy fishermen might be made to form an excellent Naval Reserve irrespective of regular seamen of the mercantile marine. 'There are,' it was urged, 'one hundred and fifty thousand men and fifteen thousand boys employed in the fisheries of the United Kingdom; besides the large number in the Canadian Dominion and Newfoundland. It would not be difficult to raise from among our large population of *bona fide* fishermen a Reserve equal to the full standard originally recommended. The drill could be taught in the most efficient manner and with the least expense to the government by sending a gunboat to visit the fishing-boats at the slack season. The local knowledge possessed by the fishermen would be of immense value in coast-defence; and there is an advantage in their having fixed places of residence and never sailing under a foreign flag; added to which is the value of their physical strength, hardy and domesticated habits, and good character.'

And now a few words for the *Royal Naval Artillery Volunteers*, another body intended for defensive purposes in the event of war. There is a corps known as the *Coast Guard*, to fulfil service on the coast in case of invasion; and under the same kind of control are the *Royal Naval Coast Volunteers*. These two bodies together comprise nearly twenty thousand men, all good seamen, and receiving liberal pay. But there is something more peculiar about the *Royal Naval Artillery Volunteers* likely to interest general readers. They are virtually an offshoot or supplement of the Volunteer Rifles, intended solely for defence against invaders. Who the invader is to be we do not know; haply and happily we may never know; but a thought on the subject now and then is reasonable enough. Our coast-line is very extensive, and needs watching at a considerable number of unprotected spots. Besides regular troops, Volunteer infantry, and cruising war-ships, it has long been felt that a naval artillery corps would be a useful addition for serving in gunboats and mortar rafts, and operating in the new art of torpedo-defensive warfare. A small Marine Volunteer Corps was raised at Hastings about 1863; others were afterwards raised in London, Liverpool, and Bristol; and at length, in 1873, parliament passed an Act sanctioning the formation of a body to be known as the *Royal Naval Artillery Volunteers*. So far from being men who are paid for their services, these Volunteers have to provide their own uniform and to pay a small subscription to a corps fund; they really enter into the matter *con amore*,

giving time, exertion, and some money for a purpose which may eventually be valuable to our common country. The government provide ships, great guns, rifles, pistols, cutlasses, and other gear for practice. Whether artisans, yachtsmen, or rowing-men would join the corps in any considerable number, could only be known by awaiting the result; but it turns out that clerks—mostly in commercial firms—come forward more readily than any other class. They like the bodily exercise and the open air after many hours of desk-plodding.

The idea is to render these Volunteers handy in the defence of rivers and estuaries, by the management of floating-batteries, armed rafts, and torpedoedoes. In practising with big guns at such places as London, Liverpool, and Bristol, there are of course neither real shot nor blank cartridges actually propelled from the weapon; a flash and a slight report are all; to run out, point, fire, and re-adjust are the exercises practised; and this is no small work with a sixty-pounder gun. After this big-gun drill, the Volunteers go through their rifle, cutlass, and pistol drill; and the young men are all the better for two or three hours of muscular exercise and ocular training. They wear a useful blue-and-white uniform while thus engaged. The *Rainbow* gunboat in the Thames off Somerset House, the *President* in the West India Docks, and two similar vessels at Liverpool and Bristol, are set apart by the Admiralty as drill-ships for the purpose. The total strength is somewhat under seven hundred men, with a naval instructor, petty-officer instructors, lieutenants, sub-lieutenants, shipkeepers, armourers, &c.

Even if never really wanted for river and estuary defence, these energetic young men will have no reason, bodily or mental, to regret the step they have taken—the devotion of a couple of hours occasionally after office or warehouse time to a right good exercise of muscle, nerve, brain, eyesight, attention, and intelligence. It is a national comfort to know that rifle and artillery volunteering are alike free from many of the evils of young men's recreations; they do not tempt to drinking, to betting, nor to dissolute companionship. All honour to those who promoted, and to those who carry out the movement.

TIM HARGATON'S COURTSHIP.

He was mother's factotum, big Tim Hargaton. I do not know how she could have managed the farm without his clear head and sound judgment to guide her. He had the name of being the closest hand at a bargain and the best judge of a 'baste' in Innishowen; and I think he deserved it; for mother very rarely lost upon her speculations in cattle, and our animals were famed for their beauty. Tim was not wholly an Innishowen man. By his mother's side he claimed descent from the Scottish settlers of the opposite coast, and much of his cautiousness and shrewdness could be traced to this infusion of kindly Scottish blood. We children had rather an awe of Tim. He ruled the outer world of our homestead with a rod of iron. Woe betide the delinquent who ventured into the garden before the 'house' had been supplied with fruit for preserving! Woe be to us if with profane hands we assaulted his beloved grapes or ravaged his trim flower-beds! I daresay it was very good for us that some one

was set in authority over the garden and farm-yard, for we were allowed quite enough freedom indoors, fatherless tomboys that we were. But years passed by; by one by one we grew to womanhood. I, the eldest, left home first—to return first; more alone for having been so happy, too happy for a little while. When I returned, a widow, the younger birds had flown from the nest. Mother had no one left but me, and she was growing old; so I cast in my own and my boy's lot with her, and soon became thoroughly acquainted with Tim Hargaton. To him I was 'the young mistress' or 'Miss Ellen,' and I own I felt often at a disadvantage with him. His quiet knowledge of subjects I was utterly ignorant of, his cool rejection of my farming theories, his almost certain success in all his ventures, overawed me; and after a struggle or two I gave in.

I think Tim must have been about forty at this time; but he looked many years younger, being fair and tall and well made, and—a bachelor. He had a merry twinkle in his gray eyes which almost contradicted the firm-set mouth with its long upper lip and square massive chin; from his half-Scotch mother he derived a close calculating disposition, hard to convince, slow to receive new impressions, strong to retain them when once received. From his father roving Pat Hargaton from Donegal, he drew an Irishman's ready wit and nimble tongue, and under all an Irishman's fickle heart, but not his warm affections, which go so far towards amending the latter fault.

Another unusual thing amongst men of his class, he was well to do, and having successfully speculated in cattle on his own account, he had money in the bank and a snug cottage. Yet year after year, Shrove-tide after Shrove-tide—the marrying season all over Roman Catholic Ireland—found Tim rejoicing in single-blessedness; nor could he have had a comfortable home, for his old mother was a confirmed invalid; and as Tim was reported to be 'a trifle near,' he only afforded her the services of a little girl scarcely in her teens. More than once mother spoke to him about matrimony, and as often Tim met her with the unanswerable argument: 'Is it as easy to peck for two as for one, ma'am?' So she ceased bothering him about it.

Now it befell that one bright frosty November day I had despatched Tim to the county town on very important business; and the better to assure myself of the favourable issue of it, I walked to meet him on his return. As the time of his return was overdue, I began to feel rather uneasy, and quickened my steps along the winding sea-side road; but a turn in it soon revealed the reason of Tim's delay. He was walking beside a very pretty country lass; and another, not so young or nearly so pretty, lagged a little behind.

'O ho, Master Tim!' I thought; 'are we to hear news of you this Shrove-tide?'

As I came forward, the girls fell back, Tim hastening on to meet me. He looked shy and sheepish enough as he advanced; and the pretty lass, whom I at once recognised as Mary Dogherty, the acknowledged belle of the barony, hung her shapely head in blushing confusion as she passed me by.

Tim was all business and stolidity once the girls were out of sight. He had lodged money for me in the county bank; settled my own and mother's

accounts with butcher, baker, and grocer; transacted all our various businesses with care and correctness; and having given up his accounts into my hands, he hurried on, whilst I continued my walk. Twilight was falling when I returned home; but although more than an hour had elapsed since Tim had preceded me on the road, he was just entering the gate as I turned from the sea-road for the same purpose. I made mother smile that evening when I told her of my encounter.

'But,' she said, 'poor little Mary has no fortune. Tim will look for one with any girl he marries.'

A few days afterwards Tim took me into his confidence. We were making our winter arrangements in the green-house, putting away summer plants whose flowering days were done, and filling up gaps in our shelves with bright chrysanthemums and other winter-blooming plants. An hour sufficed to weary mother at this work, so Tim and I were left alone amongst the flowers. For some time he worked away in silence, but I could easily see he was longing to speak, and so I determined to give him an opportunity; but he forestalled me.

'T'was a fine day the day I was in Derry, Mrs Grace,' he said, as he passed me carrying a huge coronella from one end of the greenhouse to the other.

'It was indeed, Tim. Had you many people on board the steamer?' I replied.

'No, ma'am; not to say very many. Them officer-gentlemen from the Fort.'

'Had you any of the people from about here?'

I asked.

'Hugh Dogherty and his sister, and Susie Connor, ma'am.'

'Ah, you walked home with the girls. What became of Hugh?'

'Troth, ma'am, he just got overtaken with a drop of drink, and I thought 'twas but friendly to see the girls home.'

'I am sorry to hear Hugh was so bad as that, Tim.'

'Well, sorra much was on him, Miss Ellen, but he was loath to quit Mrs Galagher's when we got off the boat, so we just left him there.—Hem! Miss Ellen, I've a thought to change my life.'

'I am very glad to hear it, Tim.'

'Yes, miss' (Tim always forgot my matronly title in confidential talk)—'yes, miss. This lonely work growing old with nobody to take care of you.'

'That is a selfish way of looking at things, Tim,' I replied.

'Begorra, miss, what else would a man marry for but to have himself took care of?'

'I suppose liking the girl he married would be a kind of reason too,' I responded.

'O ay, I'd still like to have the one I'd fancy, if she was handy.'

'And who are you thinking of?' I asked, as Tim bent over a box of geranium cuttings. 'I hope she is nice and good, and will be kind to your poor mother, and a good manager?'

'Faith, I wouldn't take one that wasn't that, Miss Ellen,' he replied, without raising his head. 'But it's hard to tell how these young ones'll turn out.'

'She is young then?'

'Young enough, and settled enough,' he responded. 'There's two I'm thinkin' of.'

'Two!' I exclaimed. 'Why, that is not right of you, Tim. You are surely old enough to know the kind of wife would suit you best; and it is unfair to the girls. They are relatives, if I guess right. Those two young women you were walking with on Saturday?'

'Just so,' replied Tim, utterly unabashed: 'Mary Dogherty an' Susie Connor. Mary's the *purtiest*,' he added in a half soliloquy.

'I have always heard she was as good as she looked,' I said. 'She has been such a dutiful daughter and good sister to those wild boys, she cannot fail to make a good wife.'

'Maybe,' quoth Tim. 'But the Dogherties is down in the world these times.'

'I know they are not very rich; but they are comfortable.'

'They aren't begging, miss, axing your pardon; but musha! it's little softness there's about the house.'

'Well, suppose she has known what it is to want, she will know better how to take care of plenty, when she gets it.'

'Troth, I don't know. Maybe when she'd get her two hands full she'd be throwin' away, for them that's reared in poverty seldom knows how to guide plenty when it comes.'

'Well, I have always heard Mary extolled for being the prettiest and the best girl in Innishowen; and I am sure you may think yourself a happy man if you can get her for your wife,' I said rather sharply.

'Sorra word a lie in that, Miss Ellen,' replied Tim, as he placed the last young geranium in its pot. 'She's a good girl, and as purty a one as you'd see in a summer's day; but I'm thinkin' I'll step up an' see them all before I *spake* to her.'

'Why, Tim, have things gone so far as that?'

'Well, I may say I have her courted up to the axin, miss.'

'And the other, Tim?' I asked, intensely amused.

'Troth, I don't know, but I have her on hands too.'

'Now, is that fair to either?' I asked rather indignantly.

'Begorra, I don't know. A man has to look before him sharp.'

'And who is the other? Mary's cousin?'

'Yes, miss—long Tom Connor's daughter, from Shruve. She's up with Mary since Holly-eve. Hudie's lookin' after her.'

'She's no beauty, Tim.'

'No, miss; but she's settled. They do say she's a trifle coarse in the temper; but she has the finest two-year-old heifer ever I set my eyes on. A pure beauty, Miss Ellen.'

'And what good would the cow be to you, Tim, if you had a sour cross-grained wife at home?'

'Maybe she wouldn't be sour or cross when she'd have a good house over her head an' plenty. She's gettin' old, Miss Ellen, and she sees the young ones comin' on, an' her left. There'd be a quare change in her if she had her own way.'

'You seem to think more of the cow than the girl, Tim!' I retorted.

'Troth, it's the *purtiest* av the two. But miss, I'm sayin', what would you advise me?'

'Marry the girl you like best, Tim; never mind the cow. A young sweet-tempered girl like Mary, who has been so good to her sickly father and

mother, so gentle and loving to those wild brothers, cannot fail to make a good wife. You will never be sorry, if you marry the girl you like best.'

'True for you, ma'am—true for you. She is a good girl, an' I'm nigh-hand sure I like her beyant any woman in the world; but Miss Ellen, I'd wish she had the cow!'

Next day I left home, nor did I return until the daffodils were glittering in the springing meadows around our home, and the rooks cawing over their fledglings in the woods behind our garden. Tim was married. I had heard that from mother early in the year; but upon which fair maid his choice had fallen, I was still uncertain. It was late at night when I returned from my travels, and mother had far too much to talk of to tell me the termination of Tim's courtship.

In the morning, I took my way into the garden, the farm-yard, the fields lying close by; but Tim was not to be seen; nor did I encounter him until late in the afternoon, when I discovered him busily trenching up some early cabbages in the back-garden. He seemed rather shy of me; but I put out my hand and greeted him kindly.

'You're welcome home, Mrs Grace, ma'am,' he said, striking his spade into the fresh-turned earth, and shaking the hand I gave him with more than ordinary warmth. 'We were thinking very long to have got you back.'

'Thank you, Tim. So I have to wish you joy.'

Tim looked sheepish, but speedily recovered himself. 'Yes, ma'am, if joy it be.'

'Oh, there can be no doubt on that score, Tim. I hope Mary is well?'

'Mary? Is it Mary Dogherty? Why, she's spoke of with Lanty Maguire that owns the ferry.'

'Why, I thought you were going to marry Mary, Tim?'

'Well, no, Miss Ellen, I did not. I b'lieve her an' Lanty was cried Sunday was eight days.'

'And what made you change your mind, Tim?'

'Well, I just took Susie; for you see, Miss Ellen, I judged a cow would make the differ betwixt any two women in the world.'

So after all, the cow carried the day!

CLERKS.

BY ONE OF THEM.

ANYBODY who can write may be a clerk: that is the general notion, which is far from correct. Among other accomplishments, an accurate and thorough knowledge of book-keeping is required, and so is a knowledge of the style employed in official and business letters. In numerous cases, parents in selecting avocations for their sons are induced, from perhaps laudable, but somewhat false notions of 'gentility,' to make them clerks, frequently with little regard to their aptitude for such an occupation. They seem to forget or to ignore the fact that there are other departments of the commercial world where there is room enough and to spare for more candidates, and many branches of skilled labour where ready and well remunerated occupation could be found. The consequence is that among those now in the service there are many who have mistaken their avocations, numbers who would probably have

succeeded well in some other sphere, not a few others more fit to wield a sledge-hammer or handle a wheel-barrow, than to write a letter, keep a ledger, or prepare a balance-sheet.

Of course, as is generally known, there are grades in this as in other professions. As might be expected, there are not only skilled and half-skilled labourers, but an admixture of drones. The variety of employment and responsibility of clerks is almost endless; there is no common level to which they are subject. Their position is peculiarly one of trust. In many cases the clerk has to control the expenditure of his employer's money, which necessitates the possession of certain habits and characteristics. It is not only important that he should possess the requisite competency for the performance of the duties intrusted to him, but his employers should know of what his peculiar individuality consists; for clerks are to a large extent intrusted with the important task of working out the general principles on which the business of their employers is transacted. The man who is naturally unsystematic can hardly be expected to work by system in his business; he who in personal and domestic matters is extravagant, will not be very likely to introduce habits of economy into his business transactions. Genteel appearance, good handwriting, the ability to add up dexterously the columns of a ledger, are not the only qualifications needful in a really efficient clerk.

The object of account-keeping should be the production of a picture which in every detail, as well as in one general view, should at all times shew what and how work has been done, and with what result it has been performed. Unfortunately it is sometimes the case that clerks, especially youthful ones, do not seem to possess an adequate idea of the great object in view, and which they are intended to assist in carrying out. In the matter of correspondence too the ability of clerks is put to the test, and their natural temperament often exhibited. The art of correct letter-writing is not to be gained by the perusal of 'a Complete Letter-writer' however complete, but can only be acquired by study and practice, combined with some natural aptitude. Business-like and civilly worded letters are an earnest of business-like transactions, and may be taken as an index to the ruling principles which guide the actions of the principals. In this way, clerks are intrusted by their employers with an important responsibility, in which there is need of the exercise of tact, judgment, and sound principles.

In no small measure does the treatment of employers mould the general disposition of clerks; and no more powerful incentive can be given to the latter than that of knowing that they are in full possession of their employer's confidence. But before extending this confidence, and appealing to the higher motives of his clerks, it is all-important that the employer shall have selected men fitted for the places they are to occupy. If an air of suspicion prevails, occasional deceit on the part of the suspected can scarcely be wondered at. It is no less requisite that clerks should put confidence in each other, but unfortunately the existence of petty jealousies often stands in the way. And this is one of the peculiar character-

istics of clerks. There often exists a feeling that one encroaches on the domains of another, and not without cause; for there are those who 'rum-cunning,' if such an expression is admissible, and those who obtain favour and promotion by mere arrogance and effrontery. Then there are the excessively plausible men, whose working capital is well nigh restricted to the glossiness of their tongue. Moral and mental excellence are as a consequence sometimes overridden, though as a rule but temporarily, for sooner or later the higher and more stalwart qualities of the quiet-spoken but thorough-going man must prevail. It must not be forgotten that employers need to have a good knowledge of human nature, to be proficient in the art of judging character, and to possess considerable tact; for unfortunately it sometimes happens that the more confidence placed in a man the less is he worthy of it.

There have been discussions innumerable as to the hours of manual labour; and important changes, some the result of legislation, have taken place. The overtaxing of mental power is, however, of graver import than the overtaxing of physical strength. In a large number of instances, clerks are in an easy position in this respect, those especially in certain government departments, banks, and some commercial houses. There are too many cases, however, in which clerks are grievously overworked. The case of many branches of the railway service may be cited where clerks are almost incessantly employed twelve or fourteen hours a day. Long hours are prevalent too in connection with many commercial houses, in which monotonous and unceasing labour during unreasonable hours, is a great tax on the nervous energies, and can only result in permanently weakening the system of those engaged in it.

The number of hours occupied is not, however, always a criterion to the amount of work performed. Could such a standard have been taken as a measure of tasks accomplished, the labour question would not have been one so difficult to deal with as it has come to be. It is sometimes the case that long hours are associated with comparatively little work. When time is not fully occupied, there is a tendency to procrastination—work is put off and put off, and then comes a final scramble to get it done by the specified time. In many instances, were shorter hours adopted and the time fully occupied, the same amount of work might be done, and done better; it would not appear so irksome, punctuality and method would be more easy of acquisition, and thus employers and employed would be alike benefited.

In point of salaries, the railway companies, and some other large companies, adopt a uniform scale applicable to junior clerks; but beyond this rule, each individual case is dealt with according to its merits, the rate of remuneration varying in proportion to length of service, nature of work performed, and responsibility entailed. Newspaper advertisements occasionally convey an idea as to the rate of remuneration in some instances. An advertiser in *The Times* recently required the services of a clerk in London, age nineteen to twenty-three, salary commencing forty pounds. Another, 'Wanted a man as clerk; salary twenty shillings weekly; must write a good hand, and be well up in

arithmetical.' It would be interesting to know what is here meant by a *man*? Three-and-fourpence a day for a *man* as clerk in London, who possibly might have a wife and what some call 'encumbrances!' One would indeed be sorry to quote this as a representative case; but it gives some weight to the assertion that there are instances too numerous of hard-working, underpaid clerks. No wonder that there should be among this class of men, so many pale and careworn faces, and coats threadbare at the elbows with long service.

Since Dickens in his inimitable style first published his tale of Scrooge and his unfortunate clerk, many changes have taken place; but it is to be feared that this character created in fiction is still reflected in some realities. It is a law of nature that everything flourishes in proportion to the encouragement it receives; and in the same way the actions and motives of servants are in a considerable measure ruled by the disposition of employers. Isolated cases there always will be in which good treatment will be abused; and the result of such circumstances naturally induces some hesitancy to repossess confidence in any; but as a principle of general application, results must depend upon the nature of the treatment adopted.

Clerk-labour would seem to be frequently employed at the lowest possible price for which it can be procured. But the same principle as that employed by the manufacturer in paying a good price for a machine that shall do its work expeditiously and well, is equally applicable to the purchasing of clerk-labour, in which much discrimination and tact are necessary. Sometimes those who are least competent and painstaking are the most dissatisfied; some there are who do not appear to understand degrees of merit, but think that all should be reduced to something like a dead level—that mere length of service, for instance, should command the maximum of reward. To length of service some reward is due, but the tools should be put into the hands of those who can use them, and who should of course be rewarded accordingly. Mr T. Brassey, M.P., in a speech on the labour question said: 'It is most economical to pay labour well. It is better to employ fewer men at high wages than more men at low wages. Every individual is better off, and the total expenditure on labour is reduced. For the non-employed, fresh fields must be found, and these will be opened by the ingenuity and enterprise of mankind.'

The employment of females in certain departments of clerk-labour would seem to be a thing much to be desired and encouraged; and there is ample scope for such employment where the duties are light, straightforward, and not too onerous in character. That the candidates are numerous may be judged from the fact that some time ago, in response to an advertisement for eleven junior counter-women at metropolitan post-offices, from one thousand to one thousand five hundred young ladies presented themselves as applicants at the offices of the Civil Service Commissioners on one day! In cases where certain active business qualifications are essential, it is not to be desired, nor is it expected that females will in any degree displace the other sex. The opposition manifested by certain of the male sex to the opening thus afforded for the extension of female labour may fairly be characterised as somewhat unmanly.

But as we had occasion to say in an article on 'Female Occupations,' this extension of female labour will by natural laws not proceed beyond natural limits. The field for female work is circumscribed, and an extension in such a direction should be hailed with satisfaction. If the introduction of female clerk-labour displaces some of the overplus of boy clerks, and induces some to adopt avocations more suited to their natural fitness, much good will have been effected; for is not the accomplishment of account-keeping and a training in good business habits calculated to make better wives and mothers? An intimate acquaintance with simple account-keeping would be a valuable addition to the education of many ladies of the present day, and might save many a man's income which, but for his wife's accomplishment, would be unwittingly muddled away.

As a social animal, clerks possess some peculiar characteristics. The banker's clerk cultivates not the acquaintance of the lawyer's clerk; the draper's clerk prefers not to associate with the grocer's clerk. In the same establishment even, the spirit of caste has often a prominent place: those who by chance sit at a mahogany table would seem to say by their demeanour that they are far removed from those who occupy a deal desk. 'At Birmingham,' says Samuel Smiles in his *Thrift*, 'there was a club of workmen with tails to their coats, and another without tails: the one looked down upon the other.' What a great thing it would be if, in society generally, people would always have the courage to appear what they are, rather than try to seem what they are not! Some clerks if asked to describe their avocation would disavow anything so common as a clerkship; they would be 'an accountant'—anything but a clerk. What will not some folk do for the sake of keeping up appearances? and amongst clerks this disposition prevails to a considerable extent; as if appearance to the world, and not the ruling principles of a man's life, constituted the sole test of respectability. Douglas Jerrold said: 'Respectability is all very well for folks who can have it for ready-money; but to be obliged to run into debt for it, it's enough to break the heart of an angel.' Let those who are anxious for sound and wholesome advice upon this important subject read Mr Smiles' book above quoted.

The social life of unmarried clerks is capable of improvement, especially in large towns, into which there is continually flowing a stream of young men, who frequently have to be content with the first apparently comfortable lodging that presents itself, and to which nothing may be so foreign as the most ordinary home comforts, in addition to the accompanying risk of new associations formed of a kind both unexpected and undesirable, often likewise accompanied by impositions various and numerous. It has been suggested that clerks' inns or clubs should be established; and the idea is well worthy the consideration of all those who in any way are interested in the matter. The advantages to be derived from undertakings of this kind would be incalculable. Employers of clerk-labour would be indirectly benefited, and they would do well to assist in the promotion of any movement in the direction indicated. As regards clerks themselves, their comforts might be considerably increased and their

expenses lessened. Such establishments might of course be made something more than mere lodging-houses. Under proper management, they might become a general resort both for amusement and intellectual pastime. The constant social intercourse of clerks with each other would tend to engender good feeling, and by this association an entirely new state of things would be brought into existence. The exercise of some amount of discipline would alone result in untold good, and the fact of membership would constitute a permanent recommendation as to respectability. As regards expense, economy would be created by co-operation; the quality of every article of food might be insured. In fact, by this means might be secured a maximum of happiness and comfort for a minimum of expense.

A larger amount of judicious physical exercise than is now practised would be of great benefit to clerks. In the case of thousands in the large towns, this is seldom resorted to beyond the mere act of walking to and from business. In large establishments, organisations for such recreation might be more encouraged, and thus conduce to the great desideratum, of a healthy mind in a healthy body.

There is some doubt as to the future position and prospects of clerks generally, but as we have ventured to hint little improvement can be anticipated until supply and demand become more equal. In many departments of skilled labour there is ample scope for educated men; in fact there is great need for them, and many a man now in clerk-service would have met with far greater success had he become an artisan. Indeed one sometimes hears an expression of regret to the effect that the task of wielding the pen, though it be 'mightier than the sword,' had not given place to the tools of a skilled workman. The fact of receiving a salary and working short hours seems to possess a considerable attraction to many, but it would be well if this unsubstantial state of feeling were removed. In many trades, such as book-binding, there is often great difficulty in obtaining a sufficient number of hands, especially 'hands with heads,' the services of a tasteful 'finisher' being highly paid.

Without in any degree depreciating the importance of and necessity for efficient clerk-labour, it would seem, taking a broad view of the question, that the chances of success in life of educated and persevering mechanics are fully equal to the prospects of the majority of clerks. In many cases the comparison is in favour of the artisan. The man with a trade possesses a sort of independence, and opportunities are frequent for his becoming his own master.

The Council of the Society of Arts has taken an important step in the matter of education. It has been arranged for examinations to take place, particularly for young men; certificates are to be given to those who are successful, and this will act as a passport to commercial employment. The subjects of examination are as follows: Arithmetic, English (composition, correspondence, and précis writing), book-keeping, commercial history, and geography, short-hand, political economy, French, German, Italian, Spanish. To entitle a candidate to this 'certificate in commercial knowledge,' he must pass in three subjects, two of which must be arithmetic and English. Every

encouragement should be given to such a movement, calculated as it is to raise the general standard of efficiency of clerks in the future; and to those now in the service such a scheme is calculated to convey some benefit.

A LADY'S JOURNEY IN MOLDAVIA.

I AM going to describe a journey I made across Moldavia in 1863. Determined to leave the dust and malaria behind us for a time, we set out from Galatz one beautiful morning in the summer of the year 1863, in search of the cooler air which blows on the western side of the Carpathians. A village of the Siebenbürgen, near the old town of Kronstadt, was our destination. Early in the morning we prepared to start—two ladies, two nurses, and four children; all resigned to the absolute control and guidance of Herr F—, our dragoman and courier; a little round bustling man, speaking every European language with the ease of a not particularly refined native; literally splendid in theory and fertility of resource while any plan was under discussion, though hardly equal to himself in a practical emergency.

It was already dark when we arrived at the town of Tekoutch. After a good deal of waiting and difficulty, the Herr succeeded in procuring for us the shelter of two flea-haunted chambers at the top of a steep ladder. Whether this place was the principal hotel of Tekoutch or only one of the Herr's failures, I cannot say. All four children were sleepy, hungry, hot, and unhappy. Oh! for milk to make a refreshing drink for the poor sick baby, who was waiting so piteously! Our repeated calls brought upon the scene a hag—a hag who would have been invaluable in melodrama, but whose presence in the actual state of affairs superadded active terror to the passive discomfort of the children. Her upper-country Moldavian was hardly intelligible, and she quite refused to understand our modes of expressing ourselves. But constant reiteration of the substantive 'Milk,' in every language and dialect known to us, was at last so far successful that we procured a small quantity of a curious gray fluid mixed with fine sand, which the poor little ones were too sleepy to judge critically; and we had soon the satisfaction of seeing them asleep on the divans with their nurses beside them. Before daybreak we were all awake, and renewing the struggle with the hag for the necessary provision of milk, to which she was good enough to add a few cups of black coffee. We removed such traces of yesterday's dust as we could, by dipping the corners of our towels in glasses of water. The Roumanian peasant's idea of washing is so different from ours that it is almost impossible to make them understand one's requirements in that respect. A jar of water, a friend to hold the jar, and standing-room in the open air, are his requisites. He stands bent well forward, to avoid the splashes, while the friend pours a little water—a very little—into his hollowed hands. These he rubs together, then holds them out for a second supply, with which he moistens the region immediately round his nose.

The whole process requires a certain amount of skill and dexterity, to which the results are hardly commensurate.

Before five A.M. we were on the road again. Our way lay through a very pleasant region, and we suffered much less from heat and dust than the day before. The country was undulating and less uniform. The roads were real roads, not mere tracks through the fields, or across the steppe. The wheat and barley were luxuriant all round; and great fields of mustard in full bloom made patches of a yellow, perfectly dazzling in its brightness. As we approached the higher country we came on large tracts of grazing-land soft and rich: trees were scattered about—oak, hornbeam, lime, and wild cherry, with an occasional birch or pine. Thorn and rose bushes, tall as trees, shook showers of blossom around. There were groups of feathery tamarisk, clusters of Guelder-rose, and bowers of white clematis thrown from shrub to shrub. The roadside was a garden of wild-flowers; tall spikes bearing alternate rings of deep purple leaves and the brightest of yellow blossoms, blue chichory, rose-coloured pea-blossom, sweet-williams, and aromatic herbs that filled the air with their perfume. A Roumanian cottage is generally a pleasant resting-place in the heat of summer; the roof of reed-thatch, or oak-shingle, projects so far as to shade the whole cottage, and within are whitewashed walls, and cushioned divans covered with rugs of thick home-made cloth, woven in brightly coloured stripes.

In the little inn at Domnul where we next arrived we laid down the children to take siesta; and by four next morning we were astrid again and eager to set out, as we knew that a few hours' driving would bring us to the Oitos Pass, of the beauties of which we had heard so much. By half-past five we were off. The country got more lovely at every step. Low wooded hills rose in front; the glens, between, highly cultivated, though uneven and rugged in places. The road was terraced along the side of an abrupt slope: the driver of the baggage wagon managed to get a wheel on the bank, and over went the wagon, boxes and bundles rolling pell-mell down the hill. An hour's work, not without much vocal accompaniment, put all to rights, and our caravan was again in motion. Many brooks made their way down from the hills, and we had to cross numerous wooden bridges, for the most part in a very sad state of repair. Here a plank was missing, and a hole yawning under the horses' feet, shewed the foaming water beneath; there another rose and tilted up as the horses trod on the end. But the steady little animals never flinched; they picked their footing as mules would have done, and so we passed in safety. At noon our rest only lasted half an hour, and soon after starting we came to the Roumanian guard-house at the entrance of the pass. We were joined at this point by two Austrian soldiers, who accompanied us on horseback through the pass, bringing up the rear of our procession.

On all sides of us the steep, richly wooded hills rose abruptly; higher mountains shewing their snowy caps at intervals as the gorge opened up the distant view. Here, there, and everywhere roared and brawled the little river; now narrow as a winding thread, deep, below the road, which crossed and recrossed it by means of bridges, the

safe passing of which seemed each time a fresh miracle; now widening in gleaming shallows, as from time to time the glen spread itself out to hold a little village. Each separate patch of gray rock contained its homestead; white cottages, with dark, quaintly carved, and pinnacled shingle-roofs, overshadowed by orchard trees or festooned with trailing vines. The population seemed to live in the water; men were fishing in the pools, women beating the linen on the flat rocks, or spreading the webs to bleach in the sunshine; while the children waded about in their one short garment, or bathed, diving plunging and chasing each other like veritable troops of 'water-babies.' What a handsome race they were, those Roumans of the Carpathians! Those we met on the road passed us with a courteous greeting, and went on their way; the women in their long white garments, drawn in at the waist by a broad brass-studded leather belt; the many coloured fringe, which fell straight, almost to their ankles, opening here and there as they walked to shew glimpses of the white below. Their feet were bare or covered by moccasins of undressed leather. Over their coils of plaited hair lay a square of embroidered linen, from one corner of which a coin hung over the forehead, and more coins formed earrings and rows of necklaces. The men wore a great loose white blouse, a studded belt, broader and heavier than those of the women, in which were stuck knives, daggers, and heavy pistols. On their feet were either moccasins or boots high above the knee. Their long uncut hair hung over their shoulders; and, twisted round their broad hats were ribbons of the national colours—red, blue, and yellow.

The ascent at first was gradual, but our horses being tired, we all walked for several hours. The soft rich beauty of the glen increased at each moment; hill rose above hill, covered with the mellow green of the young fir shoots, each tree bearing the golden red crown of last year's cones. The hanging birches with their silver stems swept over slopes smooth as a lawn, save where here and there the bold gray rock cropped out. Little glens ran up the mountain sides, scented with wild thyme, which overpowered even the fragrance of birch and fir. An hour before sunset we reached a large village the name of which I have forgotten. Here were more guard-houses, and difficulties about examining our baggage. As we were anxious to avoid this scrutiny, we administered a gratuity to the guards, who speedily became our friends; but as we were preparing to resume our journey an unfortunate difficulty arose.

The Herr announced to us after half an hour's search, that no horses were to be procured. 'Then we had better remain here for the night,' we decided at once. But no. The Herr had undertaken us, and he alone must have an opinion. We felt that he knew the country, and that we did not, and gave way, though unwillingly, on his assurance that less than twenty minutes would bring us to the Austrian frontier, where we would be sure to find fresh horses. So we reluctantly repeated ourselves. The horses had been at work since early morning, and were utterly exhausted, crawling at a foot's pace. The shades were gathering deeper and deeper around us; the ground rose much more rapidly than before; the road in some places was so bad as to be almost impassable; worst opposite a tablet let into the

rock, which informed the grateful traveller, in letters of gold and in choice Latin, how Prince Alexander Ghyka had made and finished it in 1855. The Herr's twenty minutes had lengthened to an hour or more when we reached a narrow treeless gorge, the heights crowned on either side by half-ruined fortress towers, while grim loop-holed modern walls ran down to meet in an immense gateway, whose shut doors barred our path. To the left, a small plateau of green turf bordered the crag overhanging the stream, which now held its rapid course many feet below us.

Our arrival was an event. The guardian of the pass was fat, fussy, and important, and quite deaf to any representations of our anxiety to proceed. Had we anything to declare? No; certainly not. No tea? No. Nor tobacco? No. But then it struck him that there must be some tobacco for present use among our drivers; so a strict personal search was made; the tobacco-pouches were emptied, and their contents thrown over the crag. We were injudicious enough to remonstrate, as we would willingly have paid something to allow the poor men to keep their tobacco; and this seemed to determine our *douanier* to display his authority to the full, for soon the sword was strewn with our possessions, which included bedding, provisions, and books, as well as the clothing of the whole party. The men must have had a dull time of it in this lonely mountain fort, to judge from their excitement at the display of our goods. At last we seized a packet of *tapiooa* and implored the great man to pass it and the nurses and children, that they might find rest and refreshment beyond the gates. To this, after a very critical scrutiny, he consented; and we despatched them to look for a *krishma* beyond the boundary.

When we had satisfied the *douanier* and seen such order as was possible restored to our luggage, we followed, and found them installed in a miserably dirty little place, where the children of the family, who were crowding round, looked so evidently ill, that, fearing something infectious, we were constrained to hurry the preparation of the *tapiooa*, and go out again to the open air. At last the Herr appeared, and had to confess his failure. We ought to have passed the night at the village we had left two hours before; to pass it here was impossible.

'We must feed the horses and push on,' said the Herr; 'it is not an hour's drive.'

Alas! we were beginning to understand but too well what the Herr's 'hours' were like. But the night was mild and pleasant, though already dark; and having arranged beds for the children among the cushions, we continued our journey with a briskness on the part of both drivers and horses which was wonderful after the hard day's work they had gone through. There was just light enough from the stars to show us the dangerous nature of the road, which rose in rapid zigzags. There was no parapet, and the little river ran below at a depth which increased at every turn. The heavy travelling-carriage seemed to drag back the horses, and the drivers of the wagons had to stop and push it up. At last we reached the top; but it was two o'clock before we reached Bereck. All the inhabitants were asleep; but the people of the *krishma*, after we had roused them, received us very hospitably, and busied themselves in attending to our comforts. It was late next morning

when we resumed our journey, and we were now able to perceive that the scene had a beauty of its own—that of vast extent. Nowhere have I seen a wider horizon, and yet hills closed it in all round, but at a great distance. The plain over which we were passing formed a vast amphitheatre, and the eye took in at one sweep at least a dozen villages, all widely apart from each other. The roads were as excellent as, under Austrian management, they always are. Good horses were to be found at all the posting-houses; and by the middle of the following day we had approached the mountains which bounded the other side of the plain, and found ourselves at our journey's end.

THE CHANGES OF COLOUR IN THE CHAMELEON.

From very ancient times the curious changes of colour which take place in the chameleon, and its supposed power of living on air, have been the wonder of the uninformed, and have furnished philosophers and poets with abundant material for metaphor. The belief that the animal can live on air has been exploded long ago, and was no doubt due to its power of long fasting and to its peculiar manner of breathing. It is only quite lately, however, that any satisfactory explanation has been given of the apparently capricious changes which take place in the colour of the chameleon; the latest researches on the subject being those of M. Paul Bert, the French naturalist, which have been described in a recent paper by M. E. Oustalet. As most of our readers are no doubt familiar with the appearance and figure of this curious reptile, and as descriptions of it may be found in any encyclopædia or elementary work on natural history, we do not consider it necessary to repeat them here.

Many and various theories have been proposed to explain the changes of colour which chameleons undergo; changes the importance of which have been greatly exaggerated. It is generally believed that these animals have the power of assuming in a few seconds the colour of any neighbouring object, and that they intentionally make use of this trick to escape more easily from the sight of their enemies. But this opinion is erroneous; and experiments conducted with the greatest care have proved that chameleons are incapable of modifying their external appearance in anything like so rapid and complete a manner.

The first probably to give any rational account of the causes of the puzzling changes of colour in these reptiles was the celebrated French naturalist, Milne-Edwards, about forty years ago. After a patient and minute examination, he discovered that the colouring matters of the skin, the pigments, are not confined as in mammals and birds, to the deep layer of the epidermis, but are partly distributed on the surface of the dermis or true skin, partly located more deeply, and stored in a series of little cells or bags of very peculiar formation. These colour-cells are capable of being shifted in position. When they are brought close to the surface of the outer skin, they cause a

definite hue or hues to become apparent; but by depressing the cells and causing them to disappear, the hues can be rendered paler, or may be altogether dispersed. It is noteworthy that the cuttle-fishes change colour in a similar manner.

Underneath the colour-bags (or *chromoblasts* as they are called) of Milne-Edwards, Pouchet, a recent inquirer, has discovered a remarkable layer, which he calls *carulescent*, and which possesses the singular property of appearing yellow on a clear, and blue on an opaque background.

M. Paul Bert, within the last two years, has by his researches thrown still further light upon these curious changes, and upon the mechanism by which they appear to be accomplished. He endorses most of the results of Milne-Edwards and subsequent inquirers, but has carried his observations much further. It would be out of place here to give a detailed account of the methods by which M. Bert has arrived at his conclusions. Suffice it to say, that by a series of careful experiments, he has discovered that these changes of colour seem to be entirely under the control of the nervous system, and that the chameleon can no more help them taking place than a toad can help twitching its leg when pinched. By acting in various ways upon the spinal marrow and the brain, the operator can send the colour to or withdraw it from any part of the body he pleases. Indeed a previous observer was able to cause a change of colour in a piece of the skin of the animal by acting upon it with electricity; and M. Bert has proved that even in the absence of the brain the usual changes can be produced by exciting the animal in any way; thus shewing that they are due to that class of nervous action which physiologists name *reflex*, and of which sneezing is a good example. M. Bert has also made some interesting experiments on the animal while under the influence of anæsthetics and during sleep. It was formerly known that in the latter case, and also after death, the chameleon assumed a yellowish colour, which under the influence of light became more or less dark. M. Bert has found that exactly the same effects are produced during anæsthesia as during natural sleep, and that light influences not only dead and sleeping chameleons, but that it modifies in a very curious fashion the coloration of the animal when wide awake. The same result is produced when the light is transmitted through glass of a deep blue colour, but ceases completely when red or yellow glass is used. To render these results more decisive, M. Bert contrived to throw the light of a powerful lamp upon a sleeping chameleon, taking care to keep in the shade a part of the animal's back, by means of a perforated screen. The result was curious: the head, the neck, the legs, the abdomen, and the tail became of a very dark green; while the back appeared as if covered with a light brown saddle of irregular outline, with two brown spots corresponding to the holes in the screen. Again, by placing another animal, quite awake, in full sunlight, but with the fore-part of its body behind a piece of red glass, and the hind-part underneath blue glass, M. Bert divided the body into two quite distinct parts—one of a clear green with a few reddish spots, and the other of a dark green with very prominent spots.

From his researches as a whole, M. Bert concludes: 1. The colours and the various tints

which chameleons assume are due to changes in the position of the coloured corpuscles, which sometimes, by sinking underneath the skin, form an opaque background underneath the carulescent layer of Pouchet; sometimes, by spreading themselves out in superficial ramifications, leave to the skin its yellow colour, or make it appear green and black. 2. The movements of these colour-bags or chromoblasts are regulated by two groups of nerves, one of which causes them to rise from below to the surface, while the other produces the opposite effect.

As to the effects produced by coloured glass, they no doubt result from the fact that the coloured corpuscles, like certain chemical substances, are not equally influenced by all the rays of the spectrum, the rays belonging to the violet part having alone the power of causing the colour-bags to move and drawing them close to the surface of the skin. This exciting action of light on a surface capable of contraction, an action which hitherto has only been recognised in the case of heat and electricity, is one of the most unexpected and curious facts which in recent times have transpired in the domain of physiology. Hence M. Paul Bert's researches are likely to prove of far more value than merely to explain the changes of colour which take place in the chameleon. He hopes especially in carrying out his researches to discover the reason of the favourable influence on health which is exerted by the direct action of light on the skin of children and of persons of a lymphatic temperament; and this may lead to some very important practical results in the treatment of disease. In the meantime he has done much to clear up a very puzzling and very interesting fact.

MY SWEETHEART.

Do you know my sweetheart, sir?
She has fled and gone away.
I've lost my love; pray tell to me
Have you seen her pass to-day?

Dewy bluebells are her eyes;
Golden corn her waving hair;
Her cheeks are of the sweet blush-roses:
Have you seen this maiden fair?

White lilies are her neck, sir;
And her breath the eglantine;
Her rosy lips the red carnations:
Such is she, this maiden mine.

The light wind is her laughter;
The murmuring brooks her song;
Her tears, so full of tender pity,
In the clouds are borne along.

The sunbeams are her smiles;
The leaves her footsteps light;
To kiss each coy flower into life
Is my true love's delight.

I will tell ye who she is,
And how all things become her.
Bend down, that I may whisper
My sweetheart's name is—'Summer.'

T. P.

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YOUTHFUL PRODIGES.

A CURIOUS question has more than once been asked: have the most remarkable works, in the various kinds of literary labour, been produced in the flush of youth or the calmness of age? Are men better fitted for vigorous exercise of the mind in the first half or the second half of their existence? The spring and elasticity of temperament, the warmth of feeling, the hopeful aspirations, the activity of vital energy, the longing to throw the thoughts into some kind of words or of music—all tempt one, at a first glance, to say that early authorship is more probable than later.

Certainly the examples of young authorship are neither few nor unimportant. Of course we may take Tristram Shandy's authority with as many grains of allowance as we please; but the marvels told in his colloquy are unique. Yorick declared that Vincent Quirinus, before he was eight years old, pasted up in the public schools of Rome more than four thousand five hundred theses on abstruse questions, and defended them against all opponents. Mr Shandy capped this by citing one erudite man who learned all the sciences and liberal arts without being taught any of them.

Isaac D'Israeli, in his *Curiosities of Literature*, notices many curious examples; and the subject was taken up by a pleasant writer in the *Globe* newspaper, a few months ago. Pope wrote some of his *Pastorals* at sixteen; and a large number of his works, including the translation of Homer, were thrown off before he reached thirty. Edgar Poe wrote his *Helen*, remarkable for its beauty of style, when scarcely more than eleven years old. Cowley at fifteen published his *Poetic Blossoms*; while his *Pyramus and Thisbe*, though not published till his sixteenth year, is said to have been written when he was only ten. Lord Bacon planned his great work, the *Novum Organum Scientiarum*, when only sixteen, although the writing was the work of maturer years. The late Bishop Thirlwall wrote his *Primitia* when a boy of only eleven years of age; he was one of the few who wrote

both early and late, a wonderful example of long-continued mental activity. Dr Watts almost *thought* in verse when a boy. Crabbe wrote both early and late, but not much in middle life; he published his first poem at twenty, and his *Village* before thirty; then a silence of twenty years was followed by a renewal of literary labour. Charlotte Brontë wrote in very early life, 'because she could not help it.' Chatterton, the scapegrace who applied so much of his marvellous powers to dishonest or lying purposes, wrote minor pieces of poetry at fifteen, and soon afterwards a pretended pedigree of a Bristol family. At sixteen he published the alleged plays and poems of Rowley, described by him as a priest or monk of the fifteenth century; at about seventeen he brought forward some pretended old parchments, made to appear soiled and time-worn, containing a fictitious description of an old bridge at Bristol; and then wrote biographies of Bristol artists who never lived. Coming to London, he wrote many satirical and political papers for the press; and ended his extraordinary life before he had completed his eighteenth year.

As a child (never so old as what we should call a 'lad'), Christian Heineker was one of the most singular of whom we find record. He was born at Lübeck about a century and a half ago. When only ten months old he could (if we are to believe the accounts of him) repeat every word said to him; at twelve months he knew much of Plutarch by heart; at two years he knew the greater part of the Bible; at three could answer most questions in universal history and geography (as then taught), and began to learn French and Latin; before four he began theology and church history, and expressed argumentative opinions thereon. This precocious little pedant died before he had completed his fifth year.

The late John Stuart Mill 'had no recollection of the time when he began to learn Greek; but was told it was when he was only three years old. Adanson began at thirteen to write notes on the Natural Histories of Aristotle and Pliny. The calculating boys—Vito Mangiamela, Jedediah

Buxton, Zerah Colburn, and George Parker Bidder—illustrate a remarkable phase of early mental activity.

On the other hand, many authors have produced their best works late in life, and have begun new studies at an age when the majority long for mental leisure. Izaak Walton wrote some of his most interesting biographies in his eighty-fifth year, and edited a poetical work at ninety. Hobbes published his version of the *Odyssey* at eighty-seven, and of the *Iliad* at eighty-eight. Sir Francis Palgrave, under an assumed name, published at eighty years old a French translation of a Latin poem.

Isaac D'Israeli notes that Socrates learned to play a musical instrument in his old age; that Cato learned Greek at eighty; that Plutarch entered upon the study of Latin almost as late in life; that Theophrastus began his *Characteristics* at ninety; that Sir Henry Spelman, a gentleman-farmer until fifty, at that age began to study law, and became an eminent jurist and antiquary; that Colbert, the distinguished statesman, resumed the study of Latin and of law at sixty; that the Marquis de Saint Andaire began to write poetry at seventy, 'verses full of fire, delicacy, and sweetness;' that Chaucer did not finish his *Canterbury Tales* till he had reached sixty-one; that Dryden felt his powers sufficiently in their strength at sixty-eight to plan a complete translation of Homer's *Iliad* into English verse, although circumstances prevented him from giving effect to his intentions; and (but this we must leave to the investigators who advise us to disbelieve most of the stories we hear or read concerning persons exceeding a century old) that Ludovico Monaldeschi wrote his *Memoirs* of his own times at the extraordinary age of a hundred and fifteen!

Dipping into the literary annals of different ages and different countries, there are not wanting abundant additional examples of men continuing their literary work to an advanced period of life, or else beginning *de novo* at an age when most men would prefer to lay down the pen and let the mind and the brain rest. Montfaucon, the learned authority on artistic antiquities, continued his custom of writing for eight hours a day nearly till his death at the age of eighty-seven. His labours, too, had been of a very formidable kind; for he was seventy-nine when he put the finishing touch to his *Monumens de la Monarchie Française*, in five folio volumes; and eighty-five when he published the *Bibliotheca Bibliothecarum*, in two tomes of similar magnitude. John Britton and John Nichols, artistic and antiquarian writers, both continued to drive the quill till past eighty. Sir Isaac Newton worked on till death, in his eighty-fourth year, but did not make scientific discoveries in the later period of his career. Euler worked on at his abstruse mathematical writings till past eighty. William Cowper, although he wrote a few hymns and letters in early life, did not till after fifty begin those works on which his fame chiefly rests

—beginning with *Truth*, and going on to *Table Talk*, *Expostulation*, *Error*, *Hope*, *Charity*, *Conversation*, *Retirement*, *The Task*, *John Gilpin*, and the translation of Homer. Gray wrote late and little, devoting seven years to polishing and perfecting his famous *Elegy*. Alfieri, who was taught more French than Italian when a boy, studied his native language sedulously late in life, in order to be able to read the great Italian poets; and wrote his own principal works afterwards. Goethe gave advice, which is certainly not followed by the majority of novelists—namely, not to write novels till past forty; because until then we have scarcely an adequate knowledge of the world and of the human heart. Necker said in his old age: 'The era of threescore and ten is an agreeable age for writing; your mind has not lost its vigour, and envy leaves you in peace.' This corresponds in substance to a reply given by the hale and hearty old premier, Lord Palmerston, to a question 'When is a man in his prime?' 'At seventy.'

Musical genius, or at anyrate musical aptitude, has often developed itself in very early life. Sometimes this aptitude is hereditary in a notable degree. Veit Bach, a miller and baker at Hamburg about the middle of the sixteenth century, turned his attention to music, becoming a guitar-player and teacher; his son cultivated music generally, and lived by it as a profession; the grandson devoted himself to church-music; the representative of the next generation was music director to the court and town of Eisenach. The fifth generation was marked by the renowned John Sebastian Bach, grandson's grandson of old Veit; he had to earn his living as a choir-boy, and lived to become one of the greatest of composers and organists. There were no fewer than fifty-eight of these Bachs between 1520 and 1750, every one of them musical. As an example of musical precocity, however, Mozart was far more remarkable than any of the Bachs. At three years old he experienced great pleasure in finding out chords on the pianoforte; at four he learned short pieces of music; and at six composed a pianoforte concerto, methodically arranged. He was then taken as a musical prodigy by his father (who was also a musician) to Munich, Venice, Paris, Milan, Bologna, Naples, Hamburg, London, and other cities, where the performances of the boy excited universal astonishment. In London, when only eight years old, Mozart composed six pianoforte sonatas, which he dedicated to Queen Charlotte. His first opera, *Mitridate*, was composed when he was fourteen; and about the same time he was appointed director of the Archbishop of Salzburg's concerts. He was quite an old musician by the time he became a young man—twenty-four years old when he composed *Idomeno*; at thirty, *Le Nozze di Figaro*; at thirty-one, *Don Giovanni*; at thirty-five, *Il Flauto Magico*; and at thirty-six (shortly before his death) the *Requiem*—the magnificent series of masses, motetts, symphonies, concertos, &c., coming in between at intervals. Mendelssohn was another great composer whose life-work was wholly finished by the age of thirty-eight. He gave a public concert at Berlin at the age of nine; and while yet a youth composed numerous instrumental pieces—the remarkable *Isles of Fingal*, and the still more striking music to the *Midsummer Night's Dream*. How he poured forth, as a young man, his oratorios, cantatas, *Lieder* ohne

Worte, overtures, symphonies, concertos, sonatas, quartettes, *Athalie*, *Antigone*, *Edipus*, *Walpurgis-nacht*, &c., musical biography has told at full length.

One musical phenomenon is noticeable, not for his skill as a musical performer or composer, but for the way in which music seems to have formed part of his very being. This was Carl Anton Eckert, son of a sergeant of the Guards in the Prussian service, and born in 1820. While in his cradle, he was affected to tears by any music in the minor key. At the age of one year and a little, his father play *Schöne Minka* with passion on an old pianoforte, he immediately played it with both hands, employing his knuckles to aid his tiny fingers. He retained in his ear every tune he heard; and in his fourth year could name the pitch of any note on hearing it played.

Somewhat similar to Eckert in musical sensibility was Charles Wesley, nephew of the famous founder of the Wesleyan Methodists. As a child, he could always be pacified by his mother playing the harpsichord. Tied on a chair, he could be left alone for hours amusing himself by *making* music on the instrument. Before he was three years old he could play tunes in correct time, treble and bass; and soon afterwards was able to put a tolerably good bass to any tune he heard, without study or premeditation. Much flattered as a prodigy, he nevertheless failed to rise at any period of his life above a mediocre standard as a player or composer. Samuel Wesley, Charles's brother, was like him imbued with music from the cradle. Before he was three years old he could play a tune on the harpsichord; he made a correct bass before knowing musical notation; and learned to read from the words of songs in the music-books. He composed music before he could write, and was only eight years old when he composed an oratorio on the subject of Ruth. Some of our famous composers, on the other hand, have not commenced their best works until middle life, and have produced their very best at a somewhat advanced age.

On careful collation of known facts, we shall probably arrive at the conclusion that a medium position is better than either extreme; that a judicious diffusion of mental labour throughout a series of years is the best course for mind and body. Precocity is considered by some physicians as partaking of the nature of disease; very few 'infant prodigies' live to become distinguished men and women. Dr Richardson, in his *Diseases of Modern Life*, maintains the thesis that an average activity of mind throughout the whole of life is better than forcing it abnormally at the beginning. Another writer has observed that, by crowding the main business of life into the first forty years, with the design of taking things easily by an early retirement and a long rest, the vital springs are dried up, the brain becomes prematurely withered by the excessive demands made upon it. The brain requires exercise like any other organ, but also, like any other organ, should not be worked to excess in early life. Many of our best writers have wrought well alike in early, middle and advanced age, simply because they utilised their mental and vital resources judiciously. Sir Walter Scott is cited as a good instance in point. He wrote his poems in early life; produced in his maturity the wonderful

series of novels and romances that will never die; and would probably have written his later works in masterly style if he had allowed himself time for the purpose. But adverse fortune decided otherwise; he exhausted himself by working intensely and earning enormously to pay off a debt: it virtually killed him.

FROM DAWN TO SUNSET.

PART II.

CHAPTER THE SECOND.

THE next day came the lads Kingston and Charlie Fleming. Kingston was still 'reading,' and sowing his wild oats broadcast and winning honours, all in one. Charlie just started on his career, Sir Vincent best knew how.

It happened that King Fleming found his cousin Deborah alone; she was reading in her own room, where he sought her. She turned on him with a sudden rush of colour and defiant eyes: 'You are not invited here!'

Kingston approached as if he trod on eggs, cap in hand. 'Nay, sweet lady, yet I venture. Deb, you blush! You are reading evil; or is it o' love? O love, love, thou pleasure pain and torment! That same little unruly god with his bow and arrows, hath "shot and hit me sore!"' He sat down opposite Deborah, and gazed at her in his quaint droll way, that had in it a touch of pathos too.

Deborah's lips curled: 'I understand you not.'

Kingston shook his head in some ironical mockery. 'Nay, sweet Deb, that thou dost not, for never was a tougher heart than thine! Thou wilt never love, Deb; never feel thy heart pitapat, and thy cheek flame, for any mortal man; yet thou hast great promise of beauty and grace; thou wilt doubtless make a great match—all the women o' the Flemings do; an' if thou dost, I shall be proud o' thee.'

'I do not ask your applause,' retorted Deborah, with sudden fire and disdain. 'But I will not argue with you,' she added, with disdain alone. 'You have a weak head now, except for Greek and Latin. Just like a lad, your head runs ever upon marriage, and your tongue can prate o' nothing else.'

Kingston raised his eyebrows as a shade of colour crossed his brow. 'Just like a lad? Ay, and in nature, just like a lass also. But Mistress Fleming must not be judged by nature's law; her soul soars above all sublimary matters. What dost thou dream of, Deborah? Come! Hast not one idle dream, one erring thought, one tender folly to confess? The daisy!—the daisy, Deb—two years ago!'

Deborah sprang defiantly to her feet, her eyes like two orbs of fire. 'Master Fleming,' she said, 'either you or I must quit this room! Kingston, I bear from you taunts and insults, but I will bear no more. Under cover o' this, you hate me!—and I hate you!' And with that she was gone.

Kingston sat on his stool and stared after him:

his odd brown face—a face beautiful with the changeful lights of feeling and intellect—assumed a hundred rapid expressions of wonder, regret, pity, remorse, and amazement. His beautiful child-cousin was 'one too much for him.' He never could comprehend her. He did not even admire her tanned dishevelled beauty, and he certainly did not love her; but he stayed himself to pity her, thinking that with such ungovernable passions she must go mad at last. With that, his boyish face grew sad, and he looked very forlorn, sitting in Deborah's sanctum with his lank yellow hair straying across his brow. As for Deborah, after a storm of tears hidden in the pantry, she dried her eyes on her apron like a poor passionate child, and went to seek Charlie, with no malice in her heart—only shame. Charlie was cleaning his gun in the saddle-room, watched at a respectful distance by Mistress Dinnage, who was squatting on the ground and looking low in spirits. Charlie was too busy to glance at Deb's tear-stained face, and Deborah knew him too well to kiss him when he was either intent on business or in sight of a girl. It was happiness enough to Deborah, after a careless world between them, to stand near him, to see the great strong boyish frame, at present even in its strength so loosely knit and jointed, and the brown bony hands, the dear familiar face, the unkempt locks, the wild sombre eyes, that so strangely courted and yet repelled affection.

'Art going back to-night?' ventured Deborah at length, timidly for her.

'Ay, bad luck to it. I hunt to-morrow.'

'Ah, then you will need Bayard, and father has him.'

'King will mount me.'

'Then if father *does* return, I will ride Bayard.'

'I can't squire girls. You must ride with King.'

'I will not.'

'Then I will not have you scampering alone.'

'I will ride with Jordan Dinnage. But you know, Charlie, I can keep up with the best.'

'You can; I'll do you that justice.'

'I don't like to lose you, old Charlie; we miss you sore. I fear, dear love, you are hard put to it for money. Are they all better off than you?'

'Oh, I know not and care not. I am well enough.'

Deborah sighed deeply: 'Not well enough for *thee*. But as yet, father is hard pressed; it has been a bad time for the coaching, and father is well-nigh sick of it. If he gets luck he will give up for a spell, and perchance take to it again.'

'What *luck* would you have for him, then?'

'Ah, I know not.'

Charlie smiled somewhat grimly over his gun, but said nothing. Soon Deborah went over to Mistress Dinnage, where she sat gloowering with her dark curly head crowned on one side by coquetish scarlet ribbons. They presented a curious contrast, the bailiff's daughter and the baronet's daughter—one sitting with her hands clasped round her knees, in attire bright and gay, gazing

up with a frown beneath her jaunty curls, her dark eyes lowering, and her little red-heeled shoe tapping on the ground; the other pale, subdued, and wistful, her long lorn hair falling about her unheeded and unribboned, and her dress dull in colour and in texture coarse, standing before her gaily attired inferior. As Mistress Dinnage gazed, her manner changed; irritability gave way before Deborah's plaintive eyes.

'You have been crying,' said Mistress Dinnage, in her marvellously brusque independent way.

'You know nought about it.'

'Ay, don't tell me! You have a heartache, I ^{scarcely} ^{the} know when you are sorrowing, Lady Deb, and when you are full of joy. Once, you never knew what sorrow was. Has he been worrying thee?' she asked, with a nod of the head towards Charlie.

'He? No! "The heart knoweth its own bitterness." You will do well not to question me, Meg. Come and play.'

That same evening, Sir Vincent Fleming came home late under cover of the darkness, as he always did, and on a swift horse. Deborah flew to meet him; he took her in his arms and kissed her. 'Good-even, Deb. Sweet Deb, has Enderby had visitors?' he whispered.

'Ay, father, the usual ones, whom it is sweet to blind for thy sake, for I had rare promises for Finton. And indeed you tell me, father, that brighter days are in store?'

'Ay, ay, lass; I have found a friend in need.'

'A friend, father?' They were walking through the great hall together, and Deborah hung upon her father's arm and raised her beautiful eyes to his. His own eyes sank. 'Not one o' those false, false friends,' she continued, 'who have oftentimes proved your strongest foes?'

'Nay; sweet Deb. But do not question me further,' and he turned his head restlessly away. 'This is indeed a friend to me and mine,—Deb,' he said, with a sudden bright altered change of tone, 'I have news for thee.'

'What news?' asked Deborah, with eager curiosity.

'Ah, then, you have not heard? Have the lads been here to-day?'

'Yes, father.'

'Well, if they have not told you, you may guess.'

'I cannot, I cannot! Nay, sweet father, news are scarce at Enderby; tell me quickly what has happened.'

Sir Vincent laughed. 'Little daughter of Eve, it relates to your cousin Kingston!'

'What is it, father?' Somehow the music had died out of Deborah Fleming's voice and the ripple from her lips.

King is betrothed to Mistress Beatrix Blancheflower, the old baron's daughter; and Sir Vincent laughed heartily, with his head in the air.

'Is it so, father? Well—she is rich and she is pretty. Oh, she is pretty, father!'

'Ay. But the boy is but twenty, and such a rattle-pate. Well, it will pay his debts and be a rise for the family. See that thou dost likewise, Deb,' said Sir Vincent, with playful tenderness.

As they walked, Deborah laid her head on her father's arm, which she was clasping. 'Time

enough for that, father. Dost want to be rid o' me?

He looked down and smiled; the smile softened the rugged countenance wonderfully. 'Ay, I want to be rid o' thee do I not, my Rose of Enderby? *Thou art not my right hand!*'

'Then let me be thy left. Nay; I will never leave thee, father. I like not marriage and sweet-hearing. Let Charlie wed; I will love but *thee*.'

Sir Vincent laughed. 'Time will change that tune, sweet Deb.'

Then, it down by the hall-fire, where Marjory Dinnage, at a frugal repast. It passed in silence, passion of Vincent fell to thinking deeply, and had flash. He did not eat or speak at all. After supper, she lighted her father's pipe, then sat down at his feet and laid her fair head on his knees. The fire-blaze flickered over the wide lofty hall; the stag's antlers, the rusty armour, it shone whimsically on all; but Sir Vincent and his fair daughter and the old shaggy deerhound basked in warmth and steady light.

'Dost think Beatrix Blancheflower very pretty, father?'

'Well, yes; but not so pretty as thou.'

'Other folk think not so. She has blue eyes and golden hair. She is not shy nor awkward. She is older by two years than I. O yes, she has the power of always speaking what it pleases her to say; a rare art. But for me, father, my words ever belie my heart; and for what I say one minute, I would fain pluck out my tongue the next.'

'Silly little wench! I have not noticed it in thee. *Thou art thy mother all over, Deb.*'

'Oh, I am glad! But not so good as she?'

'Well, no. Yet thy mother was not over-fond of prayer, Deb, till she began to ail. She was a madcap, she was a madcap I tell thee, like thou art; and too fond of me, Deb, to care much for her soul. But at the last God came between us two. Ah me! Tears dimmed those bold stern eyes, or the look akin to tears.'

Deborah said no more. Soon she went up to her little room, slowly, and with dragging steps. 'What has paled my Rose of Enderby?' were words that had been uttered by her father; and they haunted her. She looked in her glass. True, she was pale, but great fires burned in her eyes. What was this mighty sorrow, that weighed like a mountain on the gay careless heart? The girl was afraid. She liked it not. She shrank and trembled like a child, and lay down on her bed in a little coiled heap, and moaned in helpless agony. It was like a young wild deer; and behold, in its swift flight of joy, an arrow quivered in the bounding heart, and it fell stricken, and writhed, and raised its innocent pleading eyes, as if asking what was that grievous pain that drew the life-blood from its heart! Thus through the long, long night Deborah Fleming lay and moaned. She did not pray, she did not weep; but in the morning she was the true Deborah Fleming again; at least the world never knew her aught else; for in one long night Deb tired of sorrow, and her poor little soul longed for sunshine and joy again, and sought them wildly.

CHAPTER THE THIRD.

'And father,' said Deborah, 'I would like May Warriston to come here and stay with me for a

bit; for when you are long away, I am apt to grow lonesome, and Mistress Dinnage cannot always be here.'

'Have May then. You have only to express a wish, sweet Deb, and it is granted. If we had food to feed the guests, heaven knows you might fill the house!'

So May came. They had not met since they were children, and now they are sixteen. A gay greeting passed between them, which was witnessed by Mistress Dinnage, whose heart ached sorely. May Warriston was small and fair; she blushed with every emotion; she idolised and admired Deborah with all her soul; while Deborah loved and petted May for her sweetness and fragile grace. The Warristons and Flenings had always been staunch friends and allies; a Fleming and a Warriston had fought, brothers-in-arms, in the Crusades, and lay beneath their long-drawn effigies side by side.

May was charmed with Enderby; its grandeur, its gloom, its decay, impressed her romantic imagination, and excited her greatly. The funereal shadow of the oaks, the picturesque girl who stood at the gates beneath them, the great stone archway with its carved armorial bearings, the strange giant woman who met her at the door, the hall with its quaint stained windows, and the tall pillars ranged across, and the beautiful Deborah Fleming who rushed through the hall to meet her.

After they had dined together, they went all over the house, and explored the damp mouldering passages where the rats fled before them, and the great untenanted chambers; and studied the ancient tapestry with much laughter, and climbed up with a lantern to the garret. Then the girls scrambled out on to the roof, and ran about round the stone coping, the favourite haunt of Deborah and Charlie, and looked over the far-spreading woods, the shining waters, and the flat but fair and emerald land. Then mists and darkness descended over all. And then came a bright and frelit tea in Deborah's pretty room, with the curtained alcove shutting out the bed—and then a long talk over the fire.

'Yes, King Fleming has done for himself,' said May, resting her chin within her pretty hand, as she leaned upon the arm of the lounging-chair. 'I thought not that he would be caught so easily. Did you?'

'I thought not about it at all. Or if I did—well, I thought it *might* be Mistress Blancheflower. You have seen them often together, May?—does she love him truly?'

'Not what I call truly, faith; but then Beatrix has a cold nature at the best of times.'

'How did she win him then, who has such fire?'

'Well, it is coldness that charms these fiery natures, Deb. Why, she treated him half with disdain; anon she would steal a glance, as Beatrix can, as if to lure him on; and when he wooed her, she frowned and was cold again. Take my word on't, Mistress Blancheflower is an arch-coquette. It matters not who it be. Why, she will play her airs on old Dandy Drummond! And May burst into laughter, in which Deborah joined.

'Oh, I cannot do such things,' said Deborah, grave again, and sighing. 'Yet, 'tis no fault of mine. Were father rich, I would go to France, and get French polish and a maid to dress my hair.

Money gets all things, May; and the accessories of money give confidence and power. Were I rich, I would outshine Mistress Blancheflower!

'You!' cried May. 'Dost not know the moon even under a vapour outshines the stars? Dost know thy beauty, Deb?'

'Why, no. Sweet May, tell me! Am I beautiful? Father and Marjory tell me so; but they are blind, perchance.'

'Why, yes,' said May, laughing, 'you are; yet I like not to tell you so, for fear it should make you vain. You are beautiful as times go. Would that I were half as fair!'

How the maiden blushed. Her heart beat fast at May's simple praise, for Deborah had never believed herself to be beautiful before.

'O say not so, sweet May,' she answered; 'I would fain have your blue eyes and waxen skin and fairy-like figure. Father admires you greatly. Charlie, you have not seen. He is a man now, eighteen, and entered at Granta University.'

'Is he like you? Is he handsome, Deb?'

'Some folks say he is. My heart says there is no one like my bonnie Charlie! Yet he is somewhat of a bear. In Charlie, May, you must look for no courtly cavalier.'

'I like them not!' quoth May; 'of courtly phrases I am sick. But what like is he, this brother o' thine? Describe him.'

'Well, he is giant-tall—almost as tall as King, and may be taller.'

'I love tall men!'

'He cares not for his clothes, and dresses very rough; he has bonnie big eyes, dark and full of fire, that seem to scan you through; a brown face, a noble shapely head, and teeth as white as ivory. This be Master Fleming.'

'I like your portrait. But of Kingston I am afraid; his tongue is sharp as whipcord. He is no great friend of yours, Deb, your cousin King?'

'And no great foe,' said Deborah, supremely careless. 'Nay—"blood is thicker than water;" I like him well enow; I have nought to say against King.'

Thus they talked, and much about tall men and short, dark men and fair—a deal of nonsense, as girls did then as now.

The next day there was a hunt, and great baying of hounds about Enderby. May would have Deborah go, and bring Kingston and Charlie home. So Lady Deb rode away, with old Jordan Dinnage behind her; and much ado had Jordan on such days to keep Deborah in sight, for hearing the horn and the hounds, she would grow wild, having come of a hard-riding race.

'Bless thee!' muttered Jordan Dinnage, 'thou wilt lead me a moon-lightin' to-day. I see it in thee, lass! An' if thou doesn't break Bayard's knees or thine own neck, one day, my name's not Jordan Dinnage.—There they be! Hoicks, hoicks! Lady Deb! Gone away!!' And behold the old bairn (muttering gloomily a moment ago, between twinges of rheumatic pain) would give the view-hallo with a voice like a clarion. But Deborah Fleming was already off like a whirlwind, with a cry of joy, her hair flying. And she led Jordan a dance that day.

'You must come home, Charlie,' said Deborah. She looked happier than any queen. The brush was swinging at her saddle, and Bayard and his little mistress appeared fresh and spirited as the

dawn. All the huntsmen gathered about, and stared at Deborah, for the dawning beauty of Mistress Fleming began to be noised abroad, and the young lads from far and near would come to see the 'Rose of Enderby.' 'Who is she?' was whispered round. 'Why, Sir Vincent Fleming's daughter. They call her the Rose of Enderby.' The best of it was, Deborah was unconscious of it all. The spirit of the hunt was in her; her large gray eyes were luminous with light and life, her hair was afloat in amber clouds. She cared not even for Kingston, in moments such as those.

'You must come,' she urged plean^{of the} ready—a banquet. And besides—I h^{tal}eb, an' lady to greet ye, Charlie.'

'Then good-bye!' Charlie turned back his horse. 'Nay, Deb. Who is it? I want no "fair ladies."—But come away from these gaping looms,' he added, his boyish heart swelling with a sullen pride at the attention his sister was exciting; and they rode away together.

'It is May Warriston. Such a little angel! Quite harmless and full of fun, as much fun as Mistress Dinnage.' And then Deborah blushed, and gave a slight imperial bow, for Kingston, splendidly mounted, was now at her other side.

He bowed, with some mock-pleading in his eyes. 'What is this, fair cousin—May Warriston? Nay, Charlie, boy, I must go and see sweet May; she has always a sweet word for me, and sometimes something sweeter and kinder far! And Kingston, glancing upbraidingly at Deborah's averted face, saw that it was crimsoned with haughty shame, at which sight he was somewhat confused.

'Well, come,' said Charlie, 'and make short work of it, for I am gated at seven; thanks be to old Shand.' So they rode fast home to Enderby; Jordan groaning behind, now that the hunt was over.

Mistress Dinnage stood gravely in the lodge door in the twilight; Kingston smiled and kissed his hand; Charlie Fleming looked not up at all. May Warriston ran out with smiles and blushes, which were not lost on Kingston, who greeted her even tenderly; but May glanced up at the tall dark lad on the bay horse, and felt her foolish little heart flutter, because he bowed without a smile! or because his dark eyes scanned her through? And Deborah looked pleased, seeing May's emotion, and the girls ran gaily in together. Deborah's 'banquet' was spread in the great hall, and great noise and mirth there was over it.

CHAPTER THE FOURTH.

The day came but too soon for May to quit Enderby; the grandmother with whom she lived was ailing, and sent for her. But somehow May could not go that day, and must wait one day more; her trunks were packed, an old and trusty maid had arrived for her; but little May was sick at heart at the thought of leaving Enderby.

Was it love? Maidens did love early and long in those days; love was then a deep abiding passion, not a graceful sentiment to change with every change of raiment. At all events May loved Deborah, and clung to her.

They had been alone all that last long day, though Deborah had run many times to the door. On one of these runs she encountered Mistress Dinnage. 'What art seekin' so anxiously?' asked the latter curtly, even fiercely.

'I will not answer you, Margaret,' said Deborah with calm dignity; 'for the last five weeks you have spoken to me thus, and avoided me in every way. I have not deserved this of thee. A friend has ne'er proved a friend who cannot speak out what rankles in the heart.'

'Speak out!' exclaimed Mistress Dinnage. 'She—she—has all your heart! While I—a poor man's daughter, you care for no more. What matters it, Mistress Deborah! It must be so. Mistress Warriston is a lady, like to you, an' worthy o' you; while I, poor, unschoolary—' And Mistress Dinnage, her pride forgotten, burst into a very passion of sobs. Then the anger and scorn that had flashed from Deborah's eyes at her friend's accusation vanished in a moment at sight of her tears—Mistress Dinnage!—whom Deborah had never known to shed a tear since their childhood.

'Nay,' cried Deborah, with her hands on the quivering shoulders; 'you know this is not so. You know that neither rank nor wealth nor great lady-friends will ever step between us. Must I tell thee, *silly* Mistress Dinnage, that thou art dearer to my heart than any woman in the world? If you will not believe it, if you *cannot* see it, go your ways. I am proud as well as you. And if so paltry a matter as difference of station can ever separate, in thought or word or deed, two great good friends, then thou'rt not worthy of me, Mistress, or I of thee!' With that, they fell into each other's arms, and each wept a little, and then laughed. Then Deborah returned to May, not seeing Charlie, for whom she had been vainly watching. Charlie might surely have come to do her guest that honour, believing as he did that she was going away that day. But the youth came not.

On the next day, Charlie rode over alone to see to some of his business concerns, and by mere chance Deborah espied him going to the stables. She rushed forth: 'Charlie, May is going away in ten minutes' time; and I have been looking for you so to come and say good-bye. Come in with me, dear boy.'

Charles Fleming stamped his foot and frowned darkly. 'Why, I thought the girl had left you yesterday! Fool that I am to be caught. Deb, you know how I hate maidens, fine ladies. Why can't you let me be?'

'Because Charlie, May has sighed to say you one good-bye. Your roughness wins her heart; and you have been very kind, and seemed so fond of May.'

'Finely you read me!' muttered Charlie; but he followed Deborah into the house, to speed the parting guest. May was standing by the hall window in her soft furs, and her small face was very sad and pale and pleading; there were even tears in her eyes, which she tried in vain to keep back.

'Good-bye, Mistress Warriston,' said Charlie, looking down with his dark eyes, and then away, because of her tears. 'You must come back soon, for Deb loves to have you here,' and he gave a grasp of his hard brown hand.

'I will come; oh, I will gladly come!' faltered May, and then ran to Deborah, and hid her face on her breast. The carriage-wheels were heard; May was half borne out by Deborah, and Charlie stalked behind, looking gloomy, because he knew not how to look. May Warriston gazed

from the carriage-window, and through a maze of tears saw the brother and sister standing under the porch, Deborah kissing her two hands vehemently. Pain was uppermost in that farewell of Enderby; the little orphan May lay back on the cushions, and sobbed as if her heart would break.

WEAVING-SCHOOLS.

In all the ordinary manufacturing arts the common practice is to learn by apprenticeships; that is to say, the young who are put to any craft are left to pick up information over a course of several years by imitating the operations of the journey-men among whom they are placed. No teacher sets himself specially to tell them how things are to be done, or how they may be improved upon by an ingenious consideration of results. The craft, whatever it is, takes its chance. In some instances, from generation to generation, it pursues a jog-trot routine; in others it makes advances through the peculiar thoughtfulness of individuals. In numerous cases, the keenness of competition forces on improvements. Manufacturers try to outdo each other. But even in these cases, the actual operatives are only mechanically concerned. They obey orders, but do not originate.

Thoughtful persons have latterly been of opinion that this state of affairs is not satisfactory. They think that instead of the chance and mechanical instruction through apprenticeship, there ought to be a course of systematic teaching by experts in the several crafts, at least those in which great ingenuity and the cultivation of original ideas are required, with a view to national advantages. Hence, schools of practical science and technical instruction, to which public attention has been occasionally drawn. Much has been done in this respect by certain continental countries, in the hope of outtravelling British manufactures; and we may be said to have come to this, that the old chance method of acquiring skill in certain lines of industry will not do any longer. With these preliminary remarks, we proceed to mention that in Belgium and Germany, schools of practical trade-instruction have existed for years in almost every corporate town, under the auspices of the municipality. Now, however, the growing rivalry of these countries with our own in more than one staple industry, has at length impressed British manufacturers with the need of taking similar means to withstand the pressure of such competition.

Sharing these views, the promoters of the Yorkshire College some time ago suggested to the Ancient and Honourable Company of Cloth-workers how effectively the wants of the case might be met in the northern counties by providing, as a special department of the college, means for instruction in the manufacture of textile fabrics and designs. The suggestion was accepted in a generous spirit, all the more readily as those who initiated the scheme had personally pledged their own faith in it by subscriptions ranging from fifty to two thousand pounds. Among the munificent contributors of the larger amount were the Duke of Devonshire, Sir A. Fairbairn, and various local firms. Encouraged by the appreciative attitude of those most familiar with the requirements of the woollen trade, the Company at once entered upon this new sphere of active usefulness, granting in the first place an endowment of five hundred

and twenty pounds per annum. Subsequently they offered a further contribution of no less than ten thousand pounds, to provide adequate buildings and appliances for the Textile Industries Department. This extension of their original purpose was mainly due to the immediate and decided success of the experiment. In some measure, however, it was also the fruit of an interesting and valuable Report presented to the Company by Mr John Beaumont, the instructor of the department, after having made, at their instance, a journey of inspection among the weaving-schools of the continent. Accompanied by Mr Walter S. B. McLaren, M.A., Mr Beaumont made a six weeks' tour, during which he visited, chiefly in Germany, twenty-four weaving and seven polytechnic schools. Some of these are exclusively for instruction in weaving, while others are departments of larger technical colleges, as is the case in Leeds. The Report has been printed simply for private circulation, but we are permitted to glean its leading facts and suggestions, before describing briefly how far these are being applied to the new enterprise in the capital of the West Riding.

Among the best schools of the kind in Belgium are those of Ghent and Verviers, in both of which the instruction is free. The only conditions imposed upon students, who must be more than twelve years of age, are that they shall be able to write correctly and know the four simple rules of arithmetic. There are also in Belgium apprentice schools or workshops for apprentices, managed principally by the manufacturers of the different towns, who send work to be done in them. Throughout the whole of France there is likewise a movement in favour of technical education, and among the subjects which it is generally agreed must be taught, theoretically and practically, weaving takes a front place. At such towns as Rheims, Rouen, Lille, Lyons, Elbeuf, and Amiens, weaving-schools have been opened with success, and enjoy the benefit of government aid. In the first two named, what are known as the 'Industrial Societies' have provided, for the use of the manufacturers generally and also of the weaving students, large collections of patterns of cloth of all materials, arranged systematically in books. At Rheims the collection dates back to the year 1800, and is both interesting and useful, as shewing the various patterns and materials in use during this century. In Germany technical education is much more fully developed than in either France or Belgium, every town having its *Gewerbe* or trade-school, giving practical instruction.

At Chemnitz a new *Gewerbe* school is nearly completed, which puts all others into the shade. Its cost will be more than eighty thousand pounds, and it will accommodate between six and seven hundred students, presided over by a staff of nearly forty professors. It possesses a library of nine thousand volumes, upon which is spent three hundred pounds a year, out of an annual grant of seven thousand pounds from the government. In noting the polytechnic schools, or technical universities which exist in nearly every important town in Germany, the commissioners incidentally mention having seen in the one at Aix-la-Chapelle a number of packing-cases, which they were told contained models of English patent machines, sent as a present by the English government, at the request of the Prince Imperial of Germany. This

of course gives rise to a suggestion that the government might regard home claims with equal favour. The best polytechnic in Austria is undoubtedly that of Vienna, which has no fewer than one thousand two hundred students. The Textile Industries Department of its museum is very complete, comprising specimens of almost every manufactured article in its various stages from the raw material up to the finished piece of goods. In a similar museum at Berlin there are models of almost every machine used in either the cotton or woollen trade. Not only are there models of machines now in use, but also of those which have been long since superseded. The obvious advantage of this variety is that the students see what have been the improvements gradually made in machinery, and it enables them to study the principle upon which the different machines have been worked. The best schools, Chemnitz and Reutlingen for example, have a great assortment of hand-loom, such as treadles, machines, and jacquards—in order to produce patterns, simple and figured, in every material. None of the schools confine their teaching to the manufacture of one class of goods only. Although each devotes most attention to the material and style of cloth chiefly manufactured in the district in which it is situated, yet all teach other branches of weaving; which is thought a material advantage.

To give the students some insight into the practical management of factories, they are in many cases allowed by the manufacturers of the town to visit their mills on stated days. This is unquestionably a great advantage to the students, shewing them on a large scale and from a business point of view, those things which they are themselves doing on a small scale. In many of the schools the instruction is free. In those where charges are made, it is found that wherever the fees are low enough, the working men take advantage of the schools, and are thus made into skilful workmen and overlookers. The low fees do not drive away the sons of manufacturers; and the schools which are within the reach of all are therefore much more popular and useful than those which, from the larger fees charged, are more exclusive.

In our own country the object of weaving-schools is much misunderstood, many people having an idea that they are simply meant to teach workmen the management of a loom. To correct such a mistaken impression, it may be worth while to quote the prospectus of the Mülheim School, which describes that institution (a model one) as devoting itself to the task of 'educating overseers and manufacturers in all branches of weaving, and furnishing young men who wish to become buyers or sellers of manufactured goods with an exact knowledge of manufacturing, and therefore with a correct judgment of goods.' By the training which employers themselves receive in these schools, they are able to look after their businesses more thoroughly, and to supervise work for which they would not otherwise be qualified.

With a view to securing these and kindred benefits in the largest possible measure, various suggestions were made by the commissioners for the improvement of weaving-schools opened in this country. Means are not lacking to realise these advantages; but further time is required for the full development of the scheme. Meantime

it is sufficiently proved at Leeds that technical education is by no means a myth, but may have an appreciable influence upon manufactures. Both at the day and evening classes there is a large, sometimes an overflowing attendance of students, chiefly young men of the middle class, who either are or expect to be engaged in textile industries. In order to facilitate the more adequate and efficient fulfilment of its purposes, the college will shortly enter upon the possession of Beechgrove, a suburban estate which the executive council have purchased for their new suite of buildings. At present it occupies temporary but well adapted premises, which, pending the erection of the new college, have had to be once more enlarged, in order that the Textile Industries Department may have the accommodation requisite for sixteen looms. The pupils are assisted to arrange and design new patterns, or to classify and mingle colours with taste and judgment. They also receive instruction as to the mixing, working, and blending of the raw material; how to estimate the quality of water for manufacturing purposes; the proper use of the best ingredients for dyeing; the processes of carding, spinning, and fulling; the operations of weaving, and the mechanism of the loom, &c. In addition to the manipulative work, lectures are given on wool, mungo, shoddy, alpaca, and silk; also on the applications of chemistry to the manufacture and colouring of textile fabrics. The endowment provided by the Clothworkers' Company includes eight scholarships—four of thirty pounds, and four of twenty-five pounds per annum—for which there is a good competition. In other respects also, the appreciative interest and intelligence shewn by the students give encouraging hope of great practical benefit.

The success of the Yorkshire College has stimulated the movement in other parts of the kingdom in favour of this phase of technical education. The School of Chemistry lately founded at Bristol by the same guild of Clothworkers, in connection with the dyeing industries of the neighbourhood, is now in working order, and a textile instructor has been appointed for the Stroud school. Weaving-schools are also being established at Huddersfield and Glasgow, with the prospect of more to follow in other industrial centres. Such measures indicate a widening recognition of the truth, that our craftsmen must be taught to work upon the basis of scientific knowledge, rather than rely so much as heretofore on mere rule of thumb, if our country is to maintain its manufacturing supremacy.

TIM BAYLIS.

WE had anchored in the river Irrawaddi, after a tedious passage up from Melbourne, having on board by way of a crew as fine a sample of Australian desperadoes as ill-luck in her worst temper ever brought together on board one ship. There were men of all possible nationalities, from the swarthy negro to the handsome but treacherous Levantine sailor; the latter by far the more dangerous animal of the two. The natural result of this awkward assortment was the ever-present feeling of mistrust, mutual and deep, that prevailed between these worthies and ourselves; this latter term including those few men that had not deserted from the ship while in Melbourne.

The passage from Australia to any East Indian port is, under favourable circumstances, a journey by no means to be despised. Glorious weather, grand sunsets, a smooth sea, gentle but steady winds, all combine to render this one of the most popular of routes. But with us this had not proved so. Like Ulyssus of old, we longed for the end of our voyage; and the more we desired, so much the farther away did our beloved Ithaca seem to retreat. The time dragged wearily on, and the sense of oppression grew greater.

At our mess-table this was less felt than anywhere else on board; owing mainly to the presence of one, the subject of this little story—dear old Tim Baylis. A noble fellow in form, and a rare combination of gentleness and strength, culture and hardihood. In a word, one of those men marked out by nature to shine starlike in a profession of danger like ours. Frank, generous, and unaffected, he had won our hearts from the moment he had joined the ship; and that trust he had not for an instant declined or betrayed. Fair weather or foul, gale or calm, Tim Baylis was ever the same, clear and decisive in action, and the life and soul of all when off duty. His lightest words and happy jokes formed the watchwords of the men, the magic of his character and his manner weaving a spell around the ship. None saw the danger that threatened, in the miserable assortment of men that called themselves 'the crew,' more than he; none tried so hard to weld the incongruous materials into shape and order more than he; but like many honest open natures, he had underrated the power of the passions he had set himself to calm, and the fire had but smouldered, that under other conditions would have broken forth long before.

But here we were safe off Rangoon, the first stage in the homeward journey accomplished in safety; and anchored in as good a berth in the river as any one could desire. Of course it was dull. Whoever rested at anchor a hundred yards from the shore, and did not find before the week was over, that this sort of thing was the very acme of dullness! The only thing we could do to relieve the monotony was playing everlasting games of whist; alternated by leaning over the poop-rails, and speculating on what the dark and tangled jungle held among its tall grass and leafy branches; the neverie perchance broken by the shrill shriek of some captured or dying animal; telling us in accents unmistakable, that beautiful as the mysterious jungle forest might be to the eye, it certainly would not be a desirable spot wherein to picnic. We had at last discharged our ballast, and liberty to both port and starboard watches had been granted. The short furlough had expired; and the men were turning up rapidly in little batches of threes and fours, of course pursued by the inevitable 'sampun-wallah,' or river boatman, whose frantic efforts to obtain extra 'backsheesh' usually found a rapid and summary recompense in the decided preponderance of kicks over 'pice' (Anglice, halfpence), the last resource of impetuous Jack. Contrary to our expectations, most of our men came on board in a singularly sober state, so much so as to excite remark amongst all. It is a time-honoured custom to condone cases of over-refreshment on the various days of 'liberty' during a long voyage. John Tar—as time-honoured 'Jack' is now frequently dubbed—on that day

drops his professional character, and, to use his own most forcible expression, 'lets go the painter,' and enjoys himself after his own peculiar fashion so long as his dollars or rupees hold out.

There had been a whisper floating about for the past two or three days, in that unaccountable way that whispers have of floating; the said whisper coming aft under the fostering care and protecting wing of Isaac the half-caste mess-room steward, thereby increasing twofold in its proportions while under transit, Isaac's powers of imagination being proverbial; and the gist of all this seemed to be that discontent about something reigned paramount in the fore-castle, at least among its foreign occupants. Now, as luck would have it, we had had this sort of thing over and over again throughout the passage, and we had grown rather tired of it all; indeed, it had become too much like the cry of 'Wolf! Wolf!' to have any strong effect on our nerves, especially as nothing had ever come of it but talk, and very 'tall talk' too sometimes; but still no more than—*talk*.

Had there been any real grievance, there would have been some interest displayed; but somehow the 'casus belli' had a knack of vanishing when the matter came to be investigated; hence we had grown rather callous as to these perpetual complaints. Now, however, there seemed something more in the report than usual; but whether this was really so, or only owed its importance to Isaac's over-vidid imagination, it was hard to determine. So feeling secure in our nearness to the shore, we contented ourselves by awaiting some decisive action on the part of the malcontents. As it was, the Captain had gone ashore with the announcement that he intended to accept the proffered hospitality of the agent, a few miles out of town; and Tim Baylis and I were left on board, the former enjoying the dignity of full command.

This was just the time of the change of the moon-son, and evening shewed us that the hitherto calm and unbroken monotony would soon be visited by the demon of Storm in some one of its many phases. Warning banks of inky clouds were perpetually revealed by the brilliant streaks of lurid lightning that played among their depths. Still the ominous calm was unbroken save by the hoarse croak of frogs, eager for the coming rain. Erelong the welcome sound of 'eight bells' told of the end of the day for us; the men were soon mustered and dismissed, the final entry made in the log, and silence soon reigned fore and aft the ship.

Our hammocks were slung, Indian-coast fashion, in various positions under the poop awning; and very pleasant it was to lie at ease in the cool night-air, smoking and chatting. Tim seemed unusually silent this evening, more inclined to speculate and think, than to tell out aught from the fund of anecdote, curious and amusing, that he always was so ready to retail for our benefit.

'Charlie,' he said at length, 'I don't wonder at those niggers being so confoundedly superstitious and ghostly; a night like this makes one feel that there is something, of which we know nothing, at work above and around us. Just look out at those fiery clouds, and answer if there must not be a Power there, compared to which our grandest efforts seem no more than the croaking of yonder frogs.'

I replied generally, that the works of nature always shone forth clearly to those who looked upon them as the tokens of a Supreme Will.

Another blaze of dazzling brightness, resting on us for a moment, leaving us in denser darkness than before. The storm was certainly nearing us rapidly.

'Ah!' he said, referring to the contrast, 'how true a picture of life; that glowing light, just for an instant of time, like our own life, followed by the dense and unknown darkness of death. I am not one to believe in portents, Charlie; but I am sure that in these things, if one only read them aright, there lies much that may be taken to indicate that there is a grand life hereafter of completion and unity in the powers of mind and body, though the truth of it may be kept from us in the darkness of the future. Yet after all it is only in moments like these that a man seems either to care for or notice them.'

My reply was lost in a burst of thunder, the first of any power we had yet heard, and with it came down the rain, as only it *can* rain in the tropics. I ran to the gangway, to be clear of the awning, and saw at once that a hurricane was close upon us. The whirling and eddying clouds flew at a vast pace across the sky; the low roaring of the wind, still very distant, confirmed any doubt on that point. I did not consider that there was any cause for alarm on the ship's account; we were in an excellent anchorage; and most of our 'top-hammer' was down on deck undergoing an overhaul. Still the awnings must be furled; so I hurried below for my oil-skin coat and 'sou'-wester.' Reaching the main-deck, I was startled by the sound of voices coming from a part of the ship where I knew they could have no business. Without pausing to listen, however, I descended the companion-stairs; the voices, now hushed in whispers, following after. At the fore-cabin door I encountered the seared face of Isaac, as white as his dark skin would permit. He was about to say something; but the cry of 'All hands on deck!' from Tim's lips rang out fore and aft; so I rushed on deck without waiting to hear what he had to say. My station, as second in command, being on the fore-castle, I made directly for that point, and awaited the port-watch, in order to let go the second anchor. No one came! Where were the men? I heard voices aft. I saw the quarter-deck awning fly up in the air, released from the side-ropes. The hurricane had struck us by this time; we were leaning broadside over in an alarming manner, and rapidly dragging our single anchor towards the shore. Again I listened; I could distinguish the varied cries; they were not those of men at work. I soon knew. A fierce yell—a wilder shriek, borne along the gale. It was plain that the smothered volcano had broken forth at last. The men had mutinied! Seizing a belaying-pin from out the rail, I managed to knock the gear clear on the 'cat-head,' and thus releasing the starboard anchor, I ran aft, leaving the chain careering wildly over the windlass.

The odds were terribly against us; a set of men, each more reckless than his neighbour, pitted against a few poor fellows, taken at the utmost disadvantage. Added to this, the howling hurricane, the black darkness, and the utter impossibility of any signal being seen or heard twenty yards from the ship. I did not quite understand all this at the moment. I very soon did, however. No shot had as yet been fired, so no alarm could reach beyond by that means. Making for the

indistinct struggling mass of human figures, I tried to reach Tim's side. I could just see him standing on the after-hatch, entlass in hand, bravely keeping at bay a dozen or more of the mutineers, who vainly tried to force him back over the 'combing's' of the open hatchway. In another confused heap I could just distinguish the third officer and boat-swain; how armed, I could not see. My iron belying-pin proved no bad weapon—short, round, and heavy, it was easily handled, and did good service. After all, one had no real chance against long thin knives in anything like close single combat.

How long this performance would have lasted, and the fearfully unequal conflict been kept up, it is hard to say, when the sound of cheering broke upon us. Pansing in the struggle for a moment, we became aware that the storm had ceased as suddenly as it had begun; in fact it was almost calm. Another instant, and the cheers resolved themselves into men swarming up the sides like bees on every quarter, cutlass in hand, hardly knowing what was the matter. It was soon over. Stepanos Zenos, George Marco, and Pedro Cenci secured in irons to the main-deck stanchions, the rest were soon powerless for much harm. A hurried explanation now ensued. It seemed that after I had rushed up on deck, in answer to the cry of 'All hands!' never heeding the boy Isaac or his scared face, the lad ran up after me, taking with him the cutlass that I afterwards saw in Tim Baylis' hand; in fact he gave it to him without word or comment. Running to the gangway, he had thrown himself into the boat belonging to our old sampán-wallah, Ramoon, who always remained alongside the ship ready for a call. Rousing the old man and seizing an oar, he let go the boat, which, released from the ship, glided swiftly down the stream; struck soon after by the hurricane or north-west squall, they nearly capsized, but managed to reach the mooring-chains of H.M.S. *Pegasus*, moored half a mile down the river. A rope being flung to them they boarded her, the boy Isaac telling his tale in broken accents and incoherent sentences; still, however, the officer of the watch made out enough of the lad's story to know that mutiny, and perhaps murder, were going on a short distance up the river; so without more ado, the order was passed for 'general quarters,' and two boats' crews piped away to 'board and relieve the stranger.' The squall luckily dropping at this time, they soon were alongside of our ship, Isaac acting as pilot, when they gave us the hearty cheer that had so joyed and surprised us.

But where was Tim Baylis all this time? Surely about the ship somewhere. No! We found him at last, lying at the bottom of that fatal hatchway, and a long knife-wound in his side, from which the dark blood slowly oozed. They brought him gently up, and laid him on the after-skylight; the rain had ceased, and the tropical moon shone down on the reeking deck, lending a weird clearness to every object around. He looked very calm, his dark clear-cut features looked very white and awful now.

We all stood around while the surgeon that had come with the relief party from the old *Pegasus* carefully probed and examined the wound. It was no use; his face told us silently there was 'no hope!' that dear old Tim Baylis would soon

be at rest for ever. 'Hush! he is speaking.' Conscious once again, on board the ship he had descended with his life, the spirit of him we had learned to love so well seemed to return to us once again ere it went forth into that unknown 'darkness' he had spoken of so strangely and thoughtfully scarce an hour before. He said a few words to us all, reminding us of the many bright and happy days we had spent in times past together—days that had left their pleasant memories of the foreign shores by which they had been passed, mementos of a time gone by, but still fresh and vivid in our minds. Asking pardon of any, then, he might in thoughtless mirth unconsciously have wounded, and telling us when, in better days and more joyous scenes, we might chance to review the past and those who had peopled it, not to forget poor Tim, lying cold and dead on the banks of the Iravaddi river. Turning painfully to me, he said in faltering words: 'See my dear mother, Charlie. Tell her all is over. Tell her that though the end has come while far away from her, I did not forget her love. Ask her to forgive my wilfulness, to think of me with pity. And Charlie, don't let those niggers haul me about before I'm buried. Good-bye, old fellow. How dark it is getting!'

We laid him next day in his grave in the European cemetery, under the shade of a spreading mango; a few fellows from the old *Pegasus* and ourselves looked last on his coffin; and before we sailed, had laid a double wreath on the already bright and flowering turf. Reader! should you ever bend your steps to the sacred city of the Great Pagoda, turn aside for a moment from the deepening shadows of its ancient temple, and reading the words on a little marble cross under the branches of the old mango-tree, pause, and think on the noble death of poor Tim Baylis.

THE GIGANTIC MOA BIRD.

THE extinction of many animals that are known to have formerly existed on the earth, is a subject which cannot very easily be explained, while the number of them is greater than at first sight would be supposed. Various species no doubt undergo gradual extinction by changes which deprive them of their accustomed food; but others seem to die out from unknown causes. During the historic period a considerable number of animals have been swept off the British Islands, among which are the bear, the wolf, the Irish elk, &c. In America, during the comparatively short period of its history, various species have vanished, and others are following them. The beaver, formerly so generally spread over the whole of that country, is now only to be found in remote regions. The deer and the moose are disappearing in the same manner. The bison is very much diminished in numbers, and must ere long be extirpated. The mastodon, a creature of enormous bulk, has totally disappeared, although, along with the skeletons of them which have been discovered, there are evidences of their having lived on food derived from plants which are still existing. In other parts of the world, the dodo and the moa have perished within the last few centuries; and the apteryx is undergoing the same fate.

The moa or dinornis was a huge bird, of which

the remains are plentifully found in New Zealand. Within recent historic times, this colony was tenanted, to the almost entire exclusion of mammalia, by countless numbers of gigantic wingless birds of various genera and species, the *Dinornis gigantea*, the largest, attaining a size nearly thrice that of a full-grown ostrich. From traditions which are current among the Maoris, they were fat, stupid, indolent birds, living in forests and feeding on vegetables; while the name moa seems to have been given to them from their peculiar cry. Since remains have been found in great plenty, the investigation of this singular bird is of the greatest interest to students of natural history.

It is to the Rev. Richard Taylor that the first discovery of moa remains is due, which he thus describes: 'In the beginning of 1839 I took my first journey in New Zealand to Poverty Bay with the Rev. W. Williams (Bishop of Waiapu). When we reached Waiapu, near the East Cape, we took up our abode in a native house, and there I noticed the fragment of a large bone stuck in the ceiling. I took it down, supposing at first that it was human; but when I saw its cancellated structure, I handed it over to my companion, who had been brought up to the medical profession, asking him if he did not think it was a bird's bone. He laughed at the idea, and said: "What kind of bird could there be to have so large a bone?" I pointed out its structure; and when the natives came, requested him to ask them what it belonged to. They said it was a bone of the *tarepo*, a very large bird, that lived on the top of Hikurangi, the highest mountain on the east coast, and that they made their largest fish-hooks from its bones. I then inquired whether the bird was still to be met with; and was told that there was one of an immense size which lived in a cave, and was guarded by a large lizard, and that the bird was always standing on one leg. The chief readily gave me the bone for a little tobacco; and I afterwards sent it to Professor Owen by Sir Everard Home in 1839; and I think I may justly claim to have been the first discoverer of the moa.' Mr Taylor continued his inquiries among the natives, who informed him that the moa was quite as large as a horse; that these birds had nests made of the refuse of fern-root, on which they fed; and that they used to conceal themselves in the veronica thickets, from which, by setting them on fire, the natives drove them out and killed them; hence originated the Maori saying: 'The veronica was the tree which roasted the moa.' The natives further mentioned that when a moa-hunt was to take place notice was given inviting all to the battue. The party then spread out to inclose as large a space as possible, and drive the birds from their haunts; then gradually contracting the line as they approached some lake, they at last rushed forward with loud yells, and drove the frightened birds into the water, where they could be easily approached in canoes and despatched without their being able to make any resistance. These moa-hunts must thus have been very destructive; as, from the number of men employed, and the traces of long lines of ovens in which the natives cooked the birds, and the large quantity of egg-shells found on the western shores of New Zealand, a clear proof is given that these birds were eagerly sought for and feasted upon. Thus the poor moas had very little chance of continuing their race.

From a very interesting communication of the Rev. W. Williams, dated 17th May 1872, it would appear that the moa may not yet be entirely extirpated. 'Within the last few days,' he remarks, 'I have obtained a piece of information worthy of notice. Happening to speak to an American about these bones, he told me that the bird is still in existence in the neighbourhood of Cloudy Bay, in Cook's Strait. He said that the natives there had mentioned to an Englishman belonging to a whaling party, that there was a bird of extraordinary size to be seen only at night on the side of a hill near the place; and that he with a native and a second Englishman went to the spot; that after waiting some time they saw the creature at a little distance, which they describe as being about fourteen or sixteen feet high. One of the men proposed to go nearer and shoot; but his companion was so exceedingly terrified, or perhaps both of them, that they were satisfied with looking at the bird; when after a little time it took the alarm and strode off up the side of the mountain.'

In the *Greymouth Weekly Argus* published in New Zealand in 1876 there appeared a letter signed R. K. M. Smythe, Browning's Pass, Otago, describing in a very detailed manner the capture of two living moas, a female eight feet high, and a young one three feet shorter. The writer finishes his account of their capture by remarking that he has little doubt that he will be able to bring them both alive to Christchurch. It is therefore to be hoped that living representatives of the genus *Dinornis* still survive. Feathers of the bird have been also found in a state of preservation sufficiently good to shew that they possessed an after-shaft of a large size; and at the same time tradition and the condition in which the bones are found, retaining much of their animal matter, tend to shew how lately the bird formed part of the existing fauna of the country. If the letter be genuine, it cannot be long before ornithologists, of whom there are several of no mean repute in New Zealand, will be able to satisfy themselves on the subject.

An additional reason for supposing that these magnificent birds existed not long ago is found in the fact that specimens of their eggs have been preserved. In the volcanic sand of New Zealand, Mr Walter Mantell found a gigantic egg, of the magnitude of which he gives us a familiar idea by saying that his hat would have been just large enough to have served as an egg-cup for it. This egg must have been one of a *Dinornis* or a *Palapteryx*, and although its dimensions are considerably greater than the egg of the ostrich, still it is smaller than might have been expected from a bird from twelve to fourteen feet high. It is well known that the egg of the New Zealand apteryx, to which the moa bears a very close affinity, is one of dimensions that are quite surprising in proportion to the bulk of the bird. The apteryx is about as big as a turkey, standing two feet in height; but its egg measures four inches ten lines by three inches two lines in the respective diameters. To bear the same ratio to the bird as this, the egg of the *Dinornis gigantea* would be of the incredible length of two feet and a half by a breadth of one and three-quarters.

In the Museum at York there is a complete skeleton of a moa, which besides feathers, has the integuments of the feet partly preserved; from

which it is evident that the toes were covered with small hexagonal scales. A specimen has also been sent by Dr Haast of New Zealand to Professor Milne-Edwards, which is to be seen in the Museum of Natural History at Paris.

THE BRIDGE POOL.

AMONG the many rivers and streams watering the south-west of Ireland and falling into the Atlantic, few present greater attractions to the wandering angler than the bright little Caragh of County Kerry. This beautiful salmon river takes its rise in Lough Cloon, and after a rapid winding course of seven or eight miles through the lovely valley of Glencar, at length falls into Lake Caragh, one of the finest and most picturesque sheets of water in the south of Ireland. The river leaves Lake Caragh at its northern extremity, and after gliding for two or three miles farther through a deep rocky glen, finally discharges itself by an arm of the sea into Dingle Bay.

Lough Cloon where, as already mentioned, the river Caragh rises, is a small but very deep mountain lake, and surrounded on all sides by heather-clad hills, which gradually slope down to its rocky shores. Farther away, the mountains become more precipitous, till at length the eye rests on bare cliffs and towering crags which rear their snow-capped peaks to the skies, and complete a picture which for wild grandeur it would be difficult to surpass. On a still day, the silence around the lake is peculiarly impressive if not awe-inspiring; not a breath of air ruffles the dark waters of Lough Cloon; not a sound catches the ear but the distant bleat of a goat from the opposite crags, the shrill cry of the curlew from the moor hard by, or the sudden plunge of a leaping salmon far away in the loch.

To the ornithologist this wild spot possesses unusual attractions. Here he may at times see the golden eagle soaring aloft, a mere speck in the sky; or perchance observe a pair of the royal birds beating the hill-side in search of mountain hares to bear away to their crry on the steep side of old Carrantuoill. Such, comparatively speaking, rare birds as the peregrine falcon, the buzzard, raven, and many others that might be named, are also to be met with, and have their nests among these Kerry mountains, and afford a pleasing study to the young naturalist.

But to return. The upper part of the Caragh river, from Lough Cloon to where the stream is spanned from bank to bank by a picturesque old arch called Bealalaw Bridge, offers few inducements to the salmon-fisher, on account of the shallowness of the water; though doubtless after a flood, when the fish are moving up stream, there are two or three casts well worth a trial. Immediately below the bridge, however, and stretching almost in a direct line towards the south-west through a deep rocky gorge, lies the celebrated Bridge Pool. This far-famed and somewhat singular salmon-cast is of great length,

perhaps reaching two hundred and fifty yards from end to end, but is nowhere broader than fifty feet. The sides of the pool are for the most part steep and jagged, rising almost perpendicularly to a considerable height above the edge of the river. The water is dark coloured and of great depth, so much so, that on the brightest day it is impossible to see the rocky bottom. At the top of the pool, where the river surges through the narrow strait below the bridge, there is a considerable current; but lower down the stream gradually dies away, till at length the pool becomes almost dead water, flat and motionless.

The Bridge Pool, on account of its great depth and rocky bottom, is a favourite resting-place of the salmon. Here many an exhausted fish, after escaping the deadly nets so murderously plied by the fishermen of Lake Caragh, and surmounting the numberless obstacles and dangers besetting its path up from the sea, at length reaches a retreat where it can recruit its strength, and thus be enabled later to push on to the end of its journey. Even here, however, the poor wanderer is not altogether out of harm's way. Though safe from the fangs of prowling otter and beyond the reach of poacher's net or cruel leister, it is ever in danger of being insured by the angler's glittering lure. And see! here comes one of *Salmo salar's* deadly enemies, a Glencar fisherman, accompanied by an aged guide, a veteran follower of the craft, bearing his long shining rod. Let us watch their movements, as they consult together what is to be the fly wherewith to tempt from his hiding-place one of those noble fellows lying at anchor in the pool hard by. They have chosen a good day for their sport. There has been rain in the night, not a heavy downpour, but sufficient to colour the water a brown tinge. The morning is cloudily, with occasional gleams of sunshine; and a fresh breeze from the south-west blows steadily through the old arch, and ruffles the surface of the pool from end to end.

And now the pair have completed their preparations, and the angler, rod in hand, carefully descends the steep bank to a small sandy bay just below the bridge, from whence he can command the upper reach of the cast. The fly, skillfully directed by the wielder of the rod in a diagonal direction down stream, falls light as thistle-down close to the far bank, and the current brings it across in a bold sweep to the near side. The line is lengthened a few feet, and the process repeated again and again, till presently the foot of the rapid is reached, but with no good result. After a brief consultation the two now cross the bridge, and skirting the far side, presently approach one of the best casts in the river. Nearly opposite to where they are now standing, a giant rock boldly projects into the stream, and just below, where the dark water slowly curls round the point of the stone, lies a favourite lodge for a fish.

Commencing a few yards above this spot, and keeping well out of sight as he advances, the angler carefully covers each foot of water, till presently his fly slowly glides past the projecting angle of the rock. Ha! What was that bright

flash of silver, swiftly darting upwards from the depths of the black abyss? It is the monarch of the pool, a glorious silvery sixteen-pounder; in a second he clutches the treacherous bunch of shining feathers concealing the barbed hook; and with a flourish of his broad tail, down he goes to his lodge again; but now the angler plays his part, and with a firm stroke of the rod drives the hook deep into the fish's jaws. Away goes the affrighted creature swift as lightning down the pool. The reel groans as it rapidly pays out the line, and the rod is raised over the shoulder till bent nearly double; but on goes the gallant fish despite the tremendous pressure put upon him, and then suddenly rising to the surface, he makes a supreme effort to release himself by leaping high in the air; in descending he strikes the taut gut-cast with his tail, dashes the hook from his mouth, and once more free as air, dives to the bottom of the river.

And how does friend Piscator bear himself the while? Who but a salmon-fisher can realise the bitterness of that moment when after a splendid burst by a plucky fish, through some blunder or accident his line, all limp and drizzling, comes slowly back to him! But, my friend, you have just been taught a good though severe lesson: had you been ready at the critical moment, and slackened the line, by adroitly lowering the point of your rod when that sixteen-pounder practised so dangerous a manœuvre, the probabilities are that the effort of the fish would have proved abortive, and the slender link between you would not have thus been abruptly severed. But it is all over now, and you may rest awhile from your labours, and try to calm your feelings with a pipe of tobacco, while the veteran your companion moralises in your ear on the truth of the motto, *Nil desperandum*.

Presently a dark cloud rolls up the valley, and heavy drops of rain give notice that a shower is at hand. Our friends yonder are again bestirring themselves, and once more the heavy rod is brought into play; but fortune seems to have deserted the fisherman, for in spite of all his endeavours, yard after yard of the best water is left behind without sign of a rising fish, till at length he reaches the far end of the pool, where the river gradually widens, and the dark water changes to a brighter hue, as it glides more rapidly over a shallower bed. Here there is one last chance for the angler, and if he can only pitch his fly artistically under yonder dark holly-bush, he may yet gain the day. It is a long cast; but the fisherman throws a fine line, and the fly admirably hove skims through the air and drops like a natural insect just where the little holly-tree overshadows the water. Again that glimpse of a silvery form mounting swiftly upwards to the surface; and mark the swirling boils, indicating the rise of a heavy fish. There is a pull at the fly; the angler sharply raises the point of his rod, and once more he has hooked a lordly salmon. Again the gallant rush, the dangerous somersault, the determined struggle for dear life; but the tackle is good, the barbed steel has taken a firm hold, and all is of no avail; gradually the fisherman gains the upper hand, and inch by inch reels in the quarry, till presently the still struggling but exhausted prize lies gasping at his feet. The old man steals cautiously forward, and all trembling with excitement, approaches the water's edge; he stops; makes a quick sure stroke

with the gaff hook, and the next moment uplifts a noble fish and casts him on the sward.

But we will leave them to exult over their victory; for see! it is time to be moving; evening draws on apace, and the sun is already sinking behind the blue Kerry mountains.

INDIAN BORDER WARFARE.

THE Indian wars in the United States are a scandal to civilisation. These wars have nearly all a similar origin. The federal government by treaty settles groups of Indians on certain lands which they are to occupy exclusively in perpetuity. In the face of this arrangement, portions of the lands are taken possession of by white squatters, and no redress can possibly be obtained from the government authorities at Washington. In short, the Indians are systematically cheated, and on their taking up arms in their own defence, a savage war ensues. Circumstances involved me in one of these wars in 1874. I was accompanying a supply train from Camp Supply, a frontier post, to an expedition operating against hostile Indians. This expedition was organised at Fort Dodge, Kansas, in the summer of 1874, to subdue the Comanches and Kiowas, who had broken out on the war-path, and were committing depredations all along the Kansas border.

We left Camp Supply, to join the main command, at daylight on the 6th of September with a train of thirty-six six-mule wagons. Counting escort, teamsters, and one or two outsiders like myself, we were seventy-three in number. For the first three days no signs of Indians were seen; but every precaution was taken against them by frequently practising the teamsters in forming 'corral,' so that in the event of an attack there might be no confusion. The word 'corral' (a Spanish word, signifying an inclosure for cattle) is also used on the plains as a term for the elliptical or circular form in which a train of wagons is arranged to resist an attack by Indians; and in order that our position in the fight may be better understood, I will explain how it is formed. The teams are numbered from front to rear each morning. At a given signal all odd numbers move to the right, and even numbers to the left. When the two columns thus formed are, say, twenty or more yards apart, according to the ground and the size of the train, the leading wagons halt, and the others close up. They can then move on in parallel columns until so closely pressed by attacking Indians as to be obliged to form the 'corral' itself. To do this, the two leading wagons turn and approach each other, passing until their teams lap, when they halt, the next wagon in each column being directed so as to bring its team inside and just lapping the wagon in front. The opening is between the rear ends of the last two wagons. A 'corral' thus formed without a mule unharnessed, makes a very good defence, the mules of each team being more or less protected by the wagon in front.

To return to my story. Our route lay towards the Staked Plains, in the north-eastern corner of Texas. The Indian summer was in all its glory, and the pure bracing prairie air put us in the best of spirits. No anticipation of coming evil

disturbed our minds. The hostile Indians were supposed to be on the other side of the main command, scattering in all directions before its advance. But however easy we might feel on that score, none of the usual precautions for the safety of the train were neglected, remembering the simple rule of the plains: 'If you think there are no Indians near, then is the time to be especially on your guard.' The Indians are wily and very patient, and will hover about and watch you for days and days to find you relaxing your vigilance, and at length off your guard. They see and know full well when you think they are not near. That is just the time when, as a panther which has patiently watched its prey, they make their spring. After having camped on the third night, our suspicions were aroused that Indians were in the neighbourhood by the restless behaviour of the mules. Every frontiersman knows that a mule will smell Indians and shew signs of fear long before their approach can be discovered by a human being, and the knowledge of this fact tended to increase our watchfulness.

Next morning the scouts who went out to reconnoitre returned with the intelligence that they had found fresh tracks of Indians, who had evidently been all round us during the night. This was not pleasant news; but 'forward' was the word, so we harnessed up, and proceeded on our journey, merely taking the additional precaution of forming the wagons into two parallel columns—the first step towards forming 'corral', as I before explained. While we were crossing the 'divide' (intervening country) between the Canadian and Washita rivers, single Indian vedettes were seen at a great distance off; and on approaching a ridge which crossed our route, a small party of mounted Indians appeared on its crest. As soon as we reached a water-hole, the train was halted, mules watered, and kegs and canteens filled—a fortunate suggestion of our wagon-master. The train was now well closed up, and skirmishers thrown out on both sides parallel to it. Having done this, the march was resumed, and the attack of the savages calmly awaited.

We had not long to wait. At about three in the afternoon, at a place a mile north of the Washita river, just as the train had cleared a very deep and bad ravine, we were fiercely charged upon our right and rear by a mass of Indians, about whom there was as many more in open order. They rode down on us with a ringing war-whoop to within fifty yards of the muzzles of our rifles, filling the air with their terrible yells; their object evidently being to stampede the mules and cattle of the train, and then, in the excitement and confusion that would follow, to massacre the escort and teamsters. Finely mounted, in full war-paint, their long scalp locks braided with feathers, with wild whoops and exultant shouts, on they came. It required our utmost efforts to steady the teams and get the train 'corralled.' The cool and determined behaviour of the escort at this moment perhaps decided the fate of the train. The corral was not yet completed, and the rear of the train was on the verge of a stampede. Not a man flinched, but coolly waiting until the Indians were within short range, poured a volley into their ranks, which cooled their ardour, and they swerved off to the left. As soon as the savages found that their attempt at stampeding had failed, and that

our corral was formed, they followed a new plan of action, which was not to charge in a body, as before, but for each warrior to select his own time and mode of attack. This is the usual method of fighting among the Indians of the plains, and is termed 'circling.' First the chiefs led off, followed at regular intervals by the warriors, until there must have been five or six hundred riding in single file round us in a ring as rapidly as their fleet-footed ponies could carry them. Savages erect on their ponies, with shining spears and flaming blankets, and lofty fluttering head-gear, dashed along the ridges with piercing yells, appearing and swiftly disappearing, showing portentous against the sky in the slanting sunlight. It became a wonderful display of their marvellous powers of horsemanship. They would throw themselves over on the sides of their well-trained ponies, leaving only one hand and foot exposed to our aim, and in this position would deliver their fire over or under the necks of their ponies.

We saw several Indians and ponies knocked over by our fire; but how many were killed we were unable to find out, as directly one of their number was shot, a dash would be made by others to carry his body out of danger of falling into our hands. They will risk a dozen lives to save the scalp of a fallen comrade, for without it, according to Indian belief, he is debarred from entering the 'happy hunting-grounds.' A striking instance of their anxiety in this respect occurred during the fight in the case of a wounded Indian who was lying on the slope of a hill facing us. They tried all manner of dodges to recover his body, and eventually succeeded. The fallen man was a chief, as we could see by his extra-fine trappings; and our men, anticipating unusual efforts to carry him off, concentrated their aim on the spot where he was, so that no one could get near the place. The Indians first tried to divert our attention by sending out a warrior to ride in an opposite direction, waving an old cotton umbrella, formerly the property without doubt of some waylaid emigrant. A childish trick, but thoroughly Indian-like. Finding this ruse did not answer, they covered a panther with buffalo hides, and an Indian began pushing it down the hill before him, using it as a shield; but our bullets went through and through this cover, so he crawled back again, apparently unhurt. Then they rolled a number of buffalo robes into a huge roll, and fastened lariats to each end, so as to pull it back as soon as the Indian creeping down behind it had secured the body. This armour we were unable to penetrate, so they succeeded in recovering their chief.

At dark, the Indians ceased firing and withdrew for the night. All hands at once set to digging. Hands, bayonets, and knives were brought into requisition, and rifle-pits were soon made and fortified with forage sacks and everything available. No firing occurred on this night. Whether the Indians dug also I cannot say, but next day they had shelter. In the darkness, they approached to within speaking distance, and addressed us in language more forcible than complimentary, announcing that they had 'chased Comanches and Kiowas,' and 'had' have the scalp in the morning.' They wanted us with cowardice, telling us not to 'back like wolves,' but to come out and fight like men; an invitation which I need not say we declined. Those of

our scouts who understood the Indian language answered their abuse with the choicest epithets in a plain man's vocabulary, and worked themselves up to such a pitch of rage and excitement, that we could hardly keep them from going out to fight the red-skins single-handed. During the night we held a council of war; and considering the lives of the wounded in danger from their miserable surroundings and want of medical treatment, and believing that the main command would not be likely to ascribe our delay to its true cause, it was determined that an attempt must be made by some one to break through the surrounding Indians and reach Camp Supply, to bring us relief. It was a perilous mission, and required a man of undaunted courage, calm judgment, and unflinching resolution, besides having a thorough knowledge of the country, as most of the journey would be made in the darkness of night, to avoid wandering parties of Indians, who would be on the alert to cut off any one going for assistance. A man possessing these qualifications, a brave and shrewd scout, came forward and volunteered for this forlorn-hope; and at the darkest time of night, he quietly started out on his long and perilous ride to run the gantlet of our savage enemies. We could hear the whoops of the red-skins when they discovered him and started in pursuit; but as to whether he escaped or not, we could only fear and hope.

Next day the fight was renewed by the Indians, and actively continued on both sides with lulls and short interruptions, and by spurts at night, until the morning of the 12th. Several were wounded, the lieutenant of the escort amongst the number, and our chances were beginning to look desperate. The torments of thirst too were now added to our other sufferings. We all knew that it would be impossible to hold out much longer. Visions of torture and a cruel lingering death began to overshadow our minds with dark forebodings, when, to our unspeakable joy and relief, about noon on the 12th the greater portion of the Indians withdrew from the fight, crossed the Washita river, and disappeared over the prairie beyond; and were shortly afterwards followed by the remainder, after firing two or three spiteful volleys at us as a parting salute. We could only account for their sudden departure on the supposition that their outlying scouts had discovered signs of white men coming to our assistance; which happily proved to be the case. Although the Indians had all now departed, we were in such a helpless condition with our wounded, and twenty-two mules disabled, that we could not move the train without reinforcements, so had to make up our minds to another night of watching and suspense. The following morning the sun rose with unusual magnificence, like a rainbow of promise to our anxious spirits. Every eye eagerly scanned the horizon until faint shadows could be discerned, which gradually developed into mounted men approaching us. Were they white men or more Indians? was our anxious query. Each minute seemed an age until they were sufficiently near for us to recognise the familiar blue blouses of the cavalry; and before long a company, headed by the brave scout, galloped up to our hard-fought battleground. The scout, after leaving us, had been chased from the start, and lost all his weapons in consequence of his horse falling on rough ground;

but his pluck and shrewdness enabled him to elude his pursuers and reach Camp Supply. On his arrival there with the intelligence of our condition and peril, a company of cavalry with a surgeon was promptly hurried off to our rescue, and travelled the distance of over seventy miles without a rest. The dangers and anxieties of the last few days were now happily at an end, and death or torture no longer stared us in the face.

A HINT TO YOUNG NOBLES.

The *Times* lately observed that our young nobles would do worse than lay to heart the following words, given by Mr Froude in his *Short Studies from Great Subjects*: 'Amusement is the wine of existence, warming and feeding heart and brain. But amusement, like wine also, if taken in excess becomes as stupid as any other form of vulgar debauchery. When we read of some noble lord, with two of his friends, shooting two thousand pheasants in a week, or that another has shot four hundred brace of partridges to his own gun in a day, we perceive that these illustrious personages have been useful to the London poulterers; but it is scarcely the work for which they are intended by the theory of their existence. The annual tournament of doves between Lords and Commons at Hurlingham leads to odd conclusions about us on the continent. Every institution—even the institution of a landed aristocracy—is amenable to general opinion, and it may have worse enemies than an Irish Land Act.'

SUNSET.

Melody to ancient air
Has touched my soul. O hand so fair
That hymned it forth,
In the golden sunset there,
Of noble worth.

Feeble, poor, and old am I.
What is this life? Alas, how nigh
Seemed it to fate;
When the song I used to try
Came whispering late.

Tears are gauge of purest mind,
Drop e'en a few the maimed and blind:
I loved that song—
Mother sang it, and the wind
Swept soft along.

As I think of saintly face,
The touch of tender loving grace,
I silent turn
Where the sunbeams leapt—no trace
To find no bourn.

So leave I the sunset song,
And bid me home to where I long
To bow my head;
Blessed the hand that struck among
Chords long since dead,

Bringing back the golden time
Of love and hope in its familiar rhyme;
The corn in ear—
Breath of the bee-swarm'd murmuring lime,
To cottage dear.

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BURIAL ECCENTRICITIES.

IN all times and countries there have been queer notions about burial. We here offer to our readers a few instances of this kind of eccentricity.

Mr Wilkinson, one of the founders of the iron manufacture in Great Britain, loved iron so well that he resolved to carry it to the grave with him. He had himself buried in his garden in an iron coffin, over which was an iron tomb of twenty tons' weight. In order to make all right and secure, he caused the coffin and tomb to be constructed while he was yet alive; he delighted to shew them to his friends and visitors—possibly more to his pleasure than theirs. But there were sundry little tribulations to encounter. When he died, it was found that the coffin was too small; he was temporarily laid in the ground while a new one was made; when buried, it was decided that the coffin was too near the surface, and it was therefore transferred to a cavity dug in a rock; lastly, when the estate was sold many years afterwards, the family directed the coffin to be transferred to the churchyard. Thus Mr Wilkinson had the exceptional honour of being buried three or four times over. Mr Smiles tells us that, in 1862, a man was living who had assisted at all these interments. Mr Wilkinson was quite pleased to make presents of iron coffins to any friends who wished to possess such mementos of death and iron. In a granite county such as Cornwall, it is not surprising to read that the Rev. John Pomeroy, of St. Kew, was buried in a granite coffin which he had caused to be made.

Some persons have had a singular taste for providing their coffins long beforehand, and keeping them as objects pleasant to look at, or morally profitable as reminders of the fate of all, or useful for everyday purposes until the last and solemn day supervenes. A slater in Fifehire, about forty years ago, made his own coffin, decorated it with shells, and displayed it among other fancy shell-work in a room he called his grotto. Another North Briton, a cartwright, made his own coffin, and used it for a long time to hold his working

tools; it was filled with sliding shelves, and the lid turned upon hinges. It is said that many instances are met with in Scotland of working men constructing their own coffins 'in leisure hours.' Alderman Jones of Gloucester, about the close of the seventeenth century, had his coffin and his monument constructed beforehand; not liking the shape of the nose carved on his effigy on the latter, he had a new one cut—just in time, for he died immediately after it was finished. *One John Wheatley of Nottingham bought a coffin, and filled it with clove cordial; but he brought himself into bad repute by getting drunk too frequently, for his coffin became to him a sort of dram-shop. A young navy surgeon, who accompanied the Duke of Clarence (afterwards King William IV.) when he first went to sea as a royal midshipman, rose in after-life to an important position at Portsmouth; he had a favourite boat converted into a coffin, with the stern-piece fixed at its head, and kept it under his bed for many years. A married couple in Prussia provided themselves with coffins beforehand, and kept them in a stable, where they were utilised as cupboards for the reception of various kinds of food; but the final appropriation of the coffins was marked by a singular *contre-temps*. The man died; the widow packed the contents of both coffins into one; while the body was deposited in the other. By some mishap, the coffin full of eatables was lowered into the grave. Next day the widow opening the lid of the (supposed) cup-board, was scared at finding the dead body of her husband. Of course the interment had to be done all over again, with an interchange of coffins.

The custom of being buried in an erect position has been frequently carried out. Ben Jonson was buried upright in Westminster Abbey, a circumstance which gave occasion for the following lines in the *Inglisby Legends*:

Even rare Ben Jonson, that famow wight,

I am told is interred there bolt upright,

In just such a posture, beneath his bust,

As Tray used to sit in to beg for a crumb.

Military heroes have in more cases than one been buried by their men in upright positions on

the battle-field, sometimes lance or spear in hand. One such was found at the Curragh of Kildare; on opening an earthen tumulus, the skeleton of an old Irish chieftain was seen upright, with a barbed spear in or near one hand.

It is of course quite easy to bury in an upright posture, by setting up the coffin on end; but where, as in many recorded instances, the body is placed in sitting posture, coffins were of necessity inadmissible. When the Emperor Frederick Barbarossa opened the tomb of Charlemagne at Aix-la-Chapelle, he found the body of the great man seated on a kind of throne, as if alive, clad in imperial robes, bearing his sceptre in one hand and a copy of the Bible on his knees. At Shore-ditch churchyard, some years ago, a tomb could be seen from the high-road, placed there by a quack doctor named Dr John Gardiner. Or rather it was a high head-stone, with an inscription denoting that the inclosed spot was his 'last and best bedroom'; he had the tomb and the inscription prepared some years before his death, and was (so rumour stated) buried in a sitting posture; but on this last point the evidence is not clear.

Some folks have been buried with a mere apology for a coffin. Such was the fate of Mrs Fisher Dilke, during the time of the Commonwealth. Her husband, Mr Dilke, did not seem to regard her remains as deserving of a very high expenditure. He caused a coffin to be made from boards which lined his barn. He bargained with a sexton to make a grave in the churchyard for one groat; two groats cheaper than if it had been in the church. He invited eight neighbours to act as bearers, for whom he provided three twopenny cakes and a bottle of claret. He read a chapter of Job to them while all was being got ready; then the cakes and wine were partaken of, and the body carried to the churchyard; they put her in the grave, each threw in a spadeful of earth; and the bereaved husband and his neighbours retraced their steps. Another instance of an apology for coffins was that near Horsham, in an old mansion which had been a nunnery; when, on one occasion, the kitchen floor was taken up, there were found twelve skeletons all in a row, each between two planks; they were supposed to have been nuns.

And some folks have been buried without any coffin at all. A military officer, some half-century or so ago, directed by his will that his body should be opened by medical men, bound round with cere-cloth, and interred without a coffin in a particular part of his park. Acorns were to be sown on the spot, the most promising plant from which was to be allowed to grow there, 'in order,' as he said, 'that his remains might be useful in nourishing a sturdy British oak.' He left a legacy to his gardener to weed and water the plant. A goodly-sized oak-tree now marks the spot. This reminds one of the strange burial, or rather absence of burial, in the case of Jeremy Bentham, the celebrated jurist and philosopher. In accordance with

his will, a head of wax was affixed to his skeleton (after dissection); the figure was stuffed to the proper size, and clad in Bentham's own garments; he was placed seated in his own arm-chair, with his own walking-stick in one hand. A wag made a very whimsical anagram out of this, by simply transposing two letters in Jeremy Bentham's name — 'Jeer my bent ham.'

Miscellaneous instances crowd upon us of burial without coffins. There is a parish in the Isle of Thanet the register of which contains entries of eightpence for burying in a coffin, and sixpence without a coffin; and in the register of an adjoining parish (more than two centuries back), eightpence 'in a coffined grave,' and sixpence 'in a sheet.' About a century ago, in Dorset, a gentleman directed that his uncoffined remains should be buried ten feet deep in a particular field lying near his house, and the field to be then thoroughly ploughed over, as if to obliterate him as completely as could well be the case. The family of the St Clairs of Rosslyn were for many generations (the men at anyrate) buried without coffins. The latest of such burials took place towards the close of the seventeenth century. When the vault was next opened, the body of Sir William St Clair was seen lying in his armour with a red velvet cap on his head; nothing was decayed but a part of the white fur-edging to the cap. In some parts of Ireland it was at one time customary to carry the body to the grave-side in a coffin, upon which the body was taken out and reverently deposited in the earth. There was one Augustinian abbey graveyard in particular, near Enniscorthy, in which certain families were generally buried in this fashion, the graves being scrupulously prepared with boards, earth, sods, and grass. It is said that the Superior of the first Cistercian abbey founded in England since the Reformation lies buried in this fashion in the chapter-house of the abbey in one of the midland counties. Mr Thomas Cooke, a merchant who had well befriended Morden College, Blackheath, directed that his body should be buried in a winding-sheet, *minus* coffin, in the college grounds.

And as some people have been buried without coffins, so have there been instances of coffins buried without people. Fraud, more or less, may be suspected in such cases. About a dozen ago the death of a foreigner was entered register of an Essex parish on the faith of a certificate, apparently authentic; a coffin bought; and a grave ordered to be dug in a Catholic graveyard. The funeral, or at least what took place, all in decent order. A few afterwards a claim was put in by the widow, hundred thousand francs, due from an insurance office. The (alleged) deceased was known to be a fugitive fraudulent bankrupt. The detective police being obtained, the grave-coffins were opened, and — no corpse was there. The rascal had made out the certificate of his death, ordered his own grave and coffin

followed his own coffin to its last home as chief mourner!

With or without coffins, many persons have been buried in spots other than churchyards or graveyards; such, for instance, as in their own gardens, farms, parks, or plantations. There is a family residence in Northamptonshire marked by the singularity of having a coffin placed as it were a table in a summer-house. Sir William Temple, before his death in 1700, ordered his heart to be inclosed in a silver casket, and buried under a sun-dial in his own garden at Moor Park, opposite a particular window. Where the body was interred we have no record. William Liberty, a brick-maker in Herts, was buried in a tomb constructed by himself at the side of a lonely footpath across a field; and room was afterwards found in the same tomb for his widow. Sir James Tillie, of Pentillie Castle, Cornwall, was at his own desire laid under a tower in a summer-house in a favourite part of his park. Baskerville the printer was buried under a windmill near his garden; a dancing-master in a plantation near Macclesfield; a barrister beneath a tower which he had built at Leith Hill, Surrey; a Yorkshire squire in his own shrubbery, 'because he had passed some of the happiest hours of his life there'; a shepherd of the Chiltern Hills on the chalky slopes of the hills themselves, with an inscription cut in the grassy covering. The wish of a captain in Cromwell's army to bury his favourite charger in the churchyard of Houghton-le-Spring, was frustrated; whereupon he had it buried in his own orchard, and left orders that he himself was to be buried by the side of the horse. The editor of a Newcastle journal was buried in his own garden; and a Northumbrian gentleman under a tomb in his own orchard. Körner, the German soldier-poet who fell at Gadesbusch, was buried on the spot under an old oak; and many military men have found a similar resting-place.

Many queer stories are extant, resting, however, on tolerably good authority, of bodies being left unburied, or in some way or other kept above-ground, in the hope of cunningly defeating some law or other. The old stage-coachmen on the Great North Road, when driving through Stevenage, were wont to point to a barn in which the body of a former owner, Mr Trigg, was kept; it was inclosed in lead, and placed upon a beam of the roof. The gossips of the neighbourhood had two theories to explain this. One was to the effect that Trigg had expressed a desire that his body should be kept there 'until the day of judgment'; the other, that he believed he would return to life again thirty years after his death, and left his property subject to this contingency. He died in 1721. After the thirty years his representatives 'gave him three days' grace,' then buried him, and finally disposed of his property. Just about a century ago, a legacy of twenty-five pounds a year was left to a woman 'so long as she remained above-ground.' Her husband, on her death, put a crafty interpretation on these words; he rented a small room in a neighbour's house, and kept the body there in a coffin during the long period of nineteen years, receiving the annuity because the woman was still 'above-ground.' A gentleman, rather earlier in the same century, left orders that, when dead, he should be placed in a coffin perched up on end in a cellar. He had bequeathed all his

property to charitable uses, and had a notion that his relatives would try to defy the will unless his body were kept unburied; that is, not actually interred in the ground.

FROM DAWN TO SUNSET.

PART II.

CHAPTER THE FIFTH.

Two winters shed their snows, two summers spread their blooms round Enderby; and old Time, who gives and takes so much, turned his hour-glass, and the sands ran on. Beauty, hoar hairs, the feeble tired heart of age, the fresh and throbbing heart of youth, all bend to the death-sweep of his sickle. But his loans to the living are rich and rare; though he scathes and saddens, he seldom fails to beautify and bless. Each life, in early dawn, wins from the old graybeard's hands hope and love and joy in very showers; youth is so beautiful, youth is so hopeful, youth is so bright! Old Time gives more than he ever takes away, for he gives days replete with life and strength and gemmed with golden hours; but when he asks them back, they are shrunken and worthless, mere empty shells, from which man has extracted the sweetness and the goodness to his own vitality or destruction. Old Time is merciful; if he wounds with that keen scythe of his, he as often cures with healing balm. More often he spares from cruel hurts the aged and the young. The young spring joyously over his scythe, and he pelts them with flowers, and loves them for their daring and content; they fear him not. Strong manhood rushes at him, wrestles with him, strives to wrest from him more than he will ever give; so perchance he throws that strong man, or pitilessly severs a limb. But the aged he loves, because they are like to him; their bleeding wounds he numbs, their failing hands he takes within his own, and leads them gently on the way; then filling their poor hearts with blessed memories of youth and spring, draws his scythe around them, and lays them gently down to rest.

The Rose of Enderby was favoured by old Time, who called Dame Nature to him, and bade her paint her darling with colours rich and rare; to flit somewhat from the red beauty of the bud; to subdue it to a fainter softer hue; to darken the gold tints in the amber hair; to deepen the lustre in the laughing eyes; to whisper to the heart of the rose, so that the sweet voice of Nature might flutter that maiden heart, and raise the maiden blush, that fairest gem in maiden's dew.

Deborah Fleming was a very proud maiden. She heard those whispers; she felt these fairy knockings at her heart, but she barred the door against them. She had grown so beautiful in her flush of dawn and grace of womanhood, that if all eyes had not told her she was beautiful, she must still have known it; and a proud happy consciousness took possession of her and made her fairer. Yet these were dark days for Enderby. You might

not have thought it, to hear Deborah's songs and laughter, and to see the father and daughter together; but how often it is so—ruin is laid away like an ugly dream, not to be realised, not to be believed in, till the inevitable end. Then there was hope, hope that never dies out but with life, and Deborah threw hope round her two darlings; but she *did* suffer for them as much as her wild buoyant spirit and hopeful heart would let her. She did pray for them sometimes, not often. Deborah had well-nigh forgotten her mother's prayers, and learned no new ones. Heaven help her! But in those days Deborah's noble heart kept her true to God and man, so that she did not stray far away in her wild and wilful youth. She did strive to lead her darlings right, the old man and the young. She was their one link to good. Her woman's eloquence and woman's love had sometimes saved them. She knew their danger; she saw the dark cloud that gathered and ever deepened over Enderby. With her feeble hands she strove to avert it, and yet looked and laughed with undaunted brow, feeling the joy and gladness in her heart, that outshone all else, and broke out in uncontrollable sunshine over all. 'Oh, Charlie was young; he must sow his "wild oats" like other men.'—'Oh, that rich old uncle who had gone to America, and made fabulous wealth, and been no more heard of, would come home and die, and leave father all his fortune, to build up the fortunes of Enderby.'—'There were joyful days to come!'

Meantime Kingston Fleming was travelling abroad as a tutor, having carried off high honours from Granta. Deborah had not seen him for more than two years. Betrothed, folks said, to Beatrix Blancheflower, and they would marry soon. Charlie had left Granta, nor was he very often seen at Enderby. May's grandmother was dead, and May was an heiress, living in Italy with a stern old guardian, and sometimes dreaming of going again to Enderby, and sometimes writing a long, long letter to Deborah. 'Mistress Dinnage' lived at home, and kept her father's house, and dismissed all rustic lovers. Deborah now used the grand saloon at Enderby, long uninhabited. You approached it by the picture-gallery, which was lighted on one side at regular intervals by high windows; while on the opposite wall hung faded portraits of Flemings innumerable, knight and lady. The guests (what guests there were) were ushered along this gallery by grim old Marjory, and so into the presence of the beautiful Deborah Fleming; or if Deborah were not there, her spirit would seem to pervade the place. The roses blooming about in careless gay luxuriance; the curtains thrown back; the sun streaming in brightness through the great semicircular window, lighting up even the gloomy walls, and bringing out in curious distinctness the grotesque figures woven in the ancient tapestry; the work and flowers scattered about; the little white fluffs of kittlings disporting on the rug; the flowery perfumed

atmosphere—all breathed of Deborah Fleming and summer-time.

We don't know if the stately old guest whom Dame Marjory ushered in that morning was insensible to the charm or no. He walked to the window and sniffed at scent of the roses, looking, as he did so, blind and grim. He was an old man, but still a straight and stately one; his features were strongly marked, and intersected by deep lines of passion and craft; but he looked a thorough-bred old gentleman, so clean, so calm, so placid—and all evil passions seemed to be at rest. There was something even pathetic in the dim gray eyes and expression of gloomy weariness. He had not the appearance of a formidable foe, or of being full of cruel passions either, as he stood in the morning sun. It might be that the dark tales and rumours of old Adam Sinclair were all false; it might be envy, it might be jealousy, that made men talk thus of the wifeless and childless master of Lincoln Castle, who was the owner of lands so broad and brave. At all events he proved a friend in need to Sir Vincent Fleming, and therefore Sir Vincent gave no credit to those tales.

Now Adam Sinclair had thrice seen Deborah Fleming—once as a laughing mischievous child, grimacing at him unheeded from behind her father's chair. Again, riding with a gay cavalcade in the streets of Granta, when a young fop whispered Deborah, and she laughed (was it at him?); and he did not forget the girl on the black horse. Again he met her in the hall late one night at Enderby—he met her face to face, and Sir Vincent introduced him, under circumstances which we shall here relate.

Sir Vincent and his boon companions had been drinking deeply that night. From a far-away chamber Deborah heard the sounds of song and laughter and loud voices. She knew too that there was something more than drinking going on, that fortunes perhaps were being lost and won. She sat on and listened, looking stern and grave for her, and the great clock struck the hours two, three, four! Deborah had got it into her head that those men were all pitted against her father, and were laughing at his ruin. She walked restlessly to and fro; her cheeks began to fire and her wild eyes to flash. Suddenly her father, looking pale and unsteady, and leaning on the arm of a tall angular old man, entered the hall. Both started as if they saw a ghost; Sir Vincent grasped Adam Sinclair's arm, and so Deborah Fleming faced them in all her beauty.

'Child,' muttered Sir Vincent huskily, 'my old friend. Shake Master Sinclair by the hand. He's your father's good friend.'

Adam Sinclair smiled suavely, and bowed well-nigh to his knees; he was quite sober, and now beheld the superb figure he had seen on horseback at Granta, and a face of exquisite loveliness and disdain. But when he extended his long lean palm, Deborah put her right hand behind her back, laid the other on her father's arm, and knitted her dark brows at Sinclair with the glance of a tigress. So passed that formal introduction.

Merriment, disdain, angry passion—he remembered all, and still Deborah Fleming stood before him as she had stood on the night of his repulse. He *must* see her again and talk with

her. Twice he called in vain at Enderby, and still those falcon eyes pursued him. Day and night, he pictured some man, young and handsome, kneeling at Deborah Fleming's feet, and then he shook with the maddening thought. Then he bethought him of his own broad lands and his grand old castle, and he had hopes of he knew not what. But trembling, he rode again to Enderby. Sir Vincent was not at home; 'Missess Fleming' was.

Thus he stood, waiting for Mistress Fleming's step: he was not deaf, when it came; he counted each light reluctant footfall, and his heart beat violently, like a boy's. So the courtier and the country maiden met for the first time, alone. Master Sinclair apologised again, as he had done by Marjory, for the intrusion, but begged the favour of a few moments' interview with Mistress Fleming. Mistress Fleming bowed in proud silence, and a faint colour tinged her cheeks, at the thought of her former reception of this grave old man; she thought in her heart she had been rude and unmaidenly, perhaps unjust to him; still an unconquerable dislike and shrinking made her sit as far away from him as might be. He staid a long half hour, and he paid her delicate and courtly compliments; he shewed by his looks and conversation that he thought her not only a beautiful girl but a thoughtful intellectual woman. Deborah was half charmed against her own heart; and he found her so sweet and gentle, that the next day he rode over again, trembling with eagerness, wild hopes, and sore anxiety, and had asked to see Sir Vincent Fleming. Deborah was out. She returned from a ride in one of her mad fits of joy and animal spirits, and with loosened hair and flying step, entered the hall where Sir Vincent was alone. It was a fair spring evening; the old baronet was smoking his pipe, and striding thoughtfully to and fro, but somehow Deborah stopped on her way to his arms; she knew by his face that something unusual had happened.

'Come hither, Rose of Enderby,' said Sir Vincent, and threw down his pipe, and gathered his little daughter in his arms. 'Let me congratulate thee on thy first conquest.'

'What do you mean, father?' asked Deborah, blushing as red as any rose.

'Why, a fellow has been here this morning asking ye of me—asking ye in marriage—no less than Master Adam Sinclair, of Lincoln Castle!'

What a flood of colour rushed into Deborah's face, dyeing her very brow! She was startled, she was shamed, she was half proud, she was disdainful. 'Does that old man want to wed me, father?'

'Ay; that old man, the greatest man in the county.'

'In riches, father.'

'And in land; he has a goodly home. He has done your father good service, Deb. And he is charmed with Mistress Fleming.'

'Well, let him be charmed. I find no charms in him. Nay; shake not your head, good father. Not only do I find nought to charm me, but my heart rebels against the smooth-tongued old man who calls himself my father's friend. Father, I love him not. Not for twenty castles, would I be Master Sinclair's wife!'

'Wrong, wrong, Deb; too rash by half. Think it over, child; ask yourself if ye are not hot-headed, blind, and prejudiced; and if it were not better to wait and know Master Sinclair better, before

casting from ye the prize that has been for many years the vain desire of every maid and matron round. Wait, Deb, and let me have your sober answer to-morrow, or later still.'

Deborah grew very pale. 'Father,' she said, 'd'ye really, truly love and respect this Adam Sinclair in your heart? Is he so dear to you—and can ye trust him *so well*, that after a few hours' thought ye are ready and willing to give up your one daughter to him for life? For life, father—for life—and no love to bear me up.'

'He is an old man, Deb.'

'Yes; and he will die soon, you would say, and leave Lincoln Castle to me! But first, I would sell my soul, father, and drag on through days of unutterable horror, as Adam Sinclair's wife, before I could be released. And God might judge me, by taking me the first. O father, father! Say thou lovest me. Do not break my heart. Say thou hast some great and secret reason for liking this old man. Say thou'rt in a grievous strait, I need this help of me. Or only say, sweet father, that it wrings thine heart to ask me to part from thee. Anything, but that thou'rt willing to be rid of Deb! Ah me! Thou art cool, father—thou art indifferent, while my soul aches for sorrow at the very thought of parting from thee! Ah, but thou wilt have thy darling still—thy Charlie; while Deb, poor Deb would languish as Mistress Sinclair, with no more hope in life. I should have nought but memory, and memory would be like to drive me mad!'

Sir Vincent was fairly taken by storm, by Deborah's burst of feeling; he grew pale as herself, he folded her to his breast; for indeed under his exterior coolness, he had been sore pressed, and feeling deeply; his heart had been loudly crying out on him, for this temptation to give away his young and only daughter to a man more than double her years, and such a man as Adam Sinclair. 'Deb, Deb,' he faltered, 'thou hast vanquished me! Love thee, child—love thee, little sweet blossom! Thy mother's living image, my hope, my stay! Nay; keep in my heart, and shelter here! It is all I have to offer thee. Don't unman me, love, by these tears. 'Twas sore temptation tempted me to give thee up—to have thee the greatest lady in the county, instead of nought but the daughter of a beggar and a ruined man.'

Deborah dashed aside her tears; all her heart spoke in her brave bright upward smile upon his breast: 'Nay, father, nay—not beggared, not ruined. These are strong words. And thy love is greater treasure to me than all the wealth of Master Sinclair. Put thine arms round me. There, I am as happy and hopeful as a queen; so thou wilt be happy too. And who knows but Deborah Fleming may do great things yet? Why, if Master Sinclair finds something in this poor Deborah Fleming to love, a greater and grander may. I am not so modest but that I know my worth either.'

'Ah, thou'lt make many a heart ache, Deb, before thy day is done. Meantime, be kind and friendly to Adam Sinclair, for my sake, if he will be friends. I tell ye he will not give up hope. I know Adam. Repulse him not, Deb; let him hope on; it will sun Adam's declining days.'

'I will give him no false hopes, father. Tell him from me that I can never be his wife; thus he may be looking elsewhere. Then if it pleases him

to come to Enderby for my friendship's sake, he can. But father, does he not *darken* Enderby!

Sir Vincent frowned. 'How mean ye, child!

'Why, father, he professes too great love for you; I doubt a little these mighty professions. My love makes my eyes like Lynx's eyes, to see through all who work *thee* harm.'

'Then they have proved too keen. Adam Sinclair would cut off his right hand for me. I say not for love; he comes not of a loving kind, and men of the world deal not in such stuff one towards another; but because in former years I saved him from a worse trouble than ever I have known. There; it is *gratitude* that binds this man to me, and he has shewn it.'

'Ah! Then I will thrust away this distrust that is not worthy of me. I never knew the heart that was not grateful for great service done. And what is more, I'll ne'er believe in ingratitude. Dear Adam Sinclair! Good old man! Grateful, grim, old, true friend of my father, I will strive to forget that you have ever wished to wed me; so I may grow to like you as a friend.'

Sir Vincent laughed. 'And this is hard? What dost like? Whom dost like, Deb? Of all the brave fellows thou seest in the hunting-field, whom couldst thou choose?'

'Faith, father, I can see no "brave fellow" there but the poor gallant one streaming along in the bushy-tailed red-brown coat!'

'Sir Reynard! Ha, ha! Thou'rt thy father's true daughter. But not one beside Master Fox?'

'Not one.'

'I am glad on't. They are all rattle-pates or penniless. I wish to give thee to better folk.'

'Hark to him! Thou ambitious old dear! Well-a-day, I am in no haste to wed. As Deborah Fleming, I am happy. Oh, that I might never change that name!'

'Pshaw! Thou'lt not say this always; but unless with thy full and free consent, Deborah Fleming thou shalt remain.'

'This is the gipsy prophecy,' said Deborah, as she went up the great oak stairs. 'The grand old man who would meet me at the gates of my own home.' Then in her own room, musing: 'But "love and greatness should come hand in hand." God forbid that I ever love ye, Adam Sinclair! Unless some false witch should blind my eyes with "love in idleness," I never will. Oh, keep me from it, kind Providence! If ever so deluded and deceived, I would wake up to misery! If I saw father *starving*, would I? No; for in so doing, I would kill both my body and soul. I wonder, will King Fleming ever return? I had well nigh forgot him. And he will be for wedding Mistress Blancheflower. Why she must be getting old. Ah, well-a-day, we all grow old.'

CHAPTER THE SIXTH.

It was about this time that a distant kinswoman of Deborah's died, leaving her a legacy of twenty guineas a year. It seemed a fortune to Mistress Fleming. With the twenty golden pieces in her hand, she sat revolving in her mind what she would buy with them, happy as the blue fly that buzzed about her sunny room, she who had so often looked on grim poverty face to face. Our heroine was full of joy. The bells of Enderby were ringing out their glad gay peals. The air

was radiant with sunshine, and heavy with fragrance. Kingston Fleming was coming home, and coming to Enderby. The murmur of the bees about the ivy, the scent of clambering roses and honeysuckle, brought back the days of childhood. There, were the great boughs in the wych-elm where they swung; there, were the green woods where they played.

Deborah, with her arm leaning on the warm sill, was in a very dream of bliss, and then her wandering thoughts came back. Yes, half must be laid by in case of need, or as much as could possibly be spared; she would say half. Then there must be a new cap for Marjory, a book for Mistress Dinnage—a tale of love and romance; a hunting-knife for Jordan. And what for dear old Charlie? She must think that over. It was difficult to know what could be nice enough for one so fastidious and so dear. And what for herself? A new cap to match the lace she had; for she was no longer a hoyden with tangled locks, but 'Mistress Fleming.' She would ride into Granta the next day, and buy that little cap. Drawing the curtain which shut out the above, the maiden threw her money on the bed, and there too was laid a soft and sheeny dress, trimmed with costly cobweb lace, a dress of her grandmother's modernised artfully by herself and Mistress Dinnage. Deborah's heart beat and her colour rose. Girls are silly beings. She could think of and pine for nought but that coquettish cap which would jauntily set her love-locks.

While thus musing, the door opened abruptly, and in stalked a travel-stained figure, a tall figure, with wild dishevelled hair. It was Charlie Fleming, with the passions of his boyhood darkened and deepened, in the sombre beauty of the face that had grown stern and set. He was pale through his bronze; his long hair streamed back from his heated brow, and his whole air betokened a reckless fugitive spirit. Deborah had not seen him for weeks; she gave a cry of joy, and sprang into his arms. The roughness of the boy had passed from Charlie Fleming, but his rare demonstrations of affection were shewn to Deborah only. 'I am only here for half an hour, Deb. I must saddle horse afresh and off to Lincoln Castle. I am in rare trouble, Deb. Hush, child! I am come to thank ye for refusing Adam Sinclair. Better poverty, Deb, than that. Better starvation. I'd blow his brains out sooner than see you his wife. See that ye are never talked into this. I know your generous madness, child; let no misery move ye to it.'

'Nay, Charlie; it never shall! But if you are so averse to him, do not go to Lincoln. I hate him. I distrust him more and more. You are pale and tired too, Charlie. Is it the *old* trouble?' Deborah leaned forward, where she sat opposite him; the sweet confidante of father and brother was wont to forget all her own joys and sorrows in theirs.

Charlie raised his dark beautiful eyes to hers, then dropped them; the furtive glance was enough. Deborah thought of her gold, and her heart began to throb with tumultuous joy. 'Is it *much*, Charlie? More than—twenty guineas!'

Charlie laughed a bitter laugh. 'Don't ask me, child,' he said; 'you cannot help me, Deb. I am undone!'

'Not so undone but that I can help you a little,' whispered Deborah softly, and ran towards the

bed. Then she drew Charlie's hands down from his moody face, and with her own all radiant, laid her treasure in his hands. 'See, Charlie! This is *mine*, my very own. I have never had such riches before. Just before you came in, dear boy, I was racking my brains as to what I could buy you with these guineas, and now I give them all to you in place of presents. Don't thank me; it is thanks enough to let me stand thy friend. For what need have I for money! To me it would be worthless!'

'Who gave ye this, Deb?'

'A fairy—a true fairy, who knew your need.'

'Not May Warriston?'

'May Warriston! No! What ails you?'

'Deb, I cannot rob thee, dear. Thou needst a thousand little gewgaws such as women love. Say no more of this;' and Charlie gave her back the gold.

But Deborah was on her knees, putting her soft face up to his. 'Charlie, I will break my heart if you disdain my poor gift. I tell you again, I have no need for money—only as a temptation for finery and trinkets which it would be sin for me to wear. Old Charlie, sweet old Charlie, I *will* be mistress here! And Deborah poured her gold into his pocket and closed it up. 'You will not go to Lincoln now?'

Charlie Fleming took her face between his hands; a melancholy smile fluttered about his lips; and she, so radiantly happy: 'Will you go?' she urged.

'Yes.'

'Oh, wilful, headstrong, obstinate! To this one time I give consent; but after this, you shall go no more to Lincoln, to be the companion of that bad old treacherous man. He would fain ruin us all. I know it!'

'Tush, tush! Deb. I know just how to take Adam Sinclair. And if he wrongs mine by word or deed, let him look to it!' And the young giant rose to his feet.

Deborah caught his arm. 'You are not going to fight him?'

'Fight him? No; we are friends, bosom friends, like us thyself to Mistress Dinnage.'

'Well, be not rash and hot-headed. I know your fiery temper, and am ever in fear and trembling, with such a man as Master Sinclair too, that you should quarrel and hurt him sorely. Quarrel not about *me*, Charlie; he is always courteous to me.'

'I hope so. Good-bye, sweet Deb, good-bye! The brother and sister kissed, and Charlie sped to the court-yard.

Old Jordan held Bayard for him, ready saddled. 'Thanks, good Jordan. Where is my father?'

'I ain't seen him these three days, Master Charlie. An' now thou'rt goin' away agen, these be dull days for Enderby an' Mistress Deborah.'

'Where's Mistress Dinnage?' asked Charlie, dropping his keen glance to the old man's face.

'In the manor here; she well-nigh lives with Mistress Deborah, an' well she may.'

'I never see her about.'

'She's there though, Master Charlie.'

'Good-bye, Jordan. Take care of them.' And Charlie Fleming, striking spurs to his horse, rode away; not so fast but that one pair of dark eyes, full of proud reluctant tears and lingering passion, looked from a window overhead, and watched him as he sped away.

'Poor little Deb!' muttered Charlie, as his good horse bore him far away. 'I will not forget thee, dear. Poor little maid! It has eased her heart. A drop, a drop in the ocean of my troubles, is Deb's gold to me. Poor child! Now, if you fall, Adam Sinclair, might is my only chance.'

HOTEL HOSPITALS.

SOME years ago, a Birmingham medical man—Mr West—in a very ably written contrast between English and French surgery, drew attention to a kind of hospital common abroad, and much appreciated there by the class for whose benefit these institutions are intended, but of which in Britain we have no examples, or at most one or two experimental waris on a very limited scale. These institutions are hospitals where patients of the middle class who can afford and are willing to pay a moderate sum, can be received when serious illness or accident unfortunately necessitates medical aid—'a special kind of hospital,' said Mr West, 'unknown in England, which I think of great utility, and of which there is, I believe, an urgent need, not only in London, but also in every large town throughout the provinces.'

Mr West's paper does not appear to have borne much fruit at the time; but recently the question has appeared again, and this time, so much has been done to give prominence to the movement, that a public meeting was held last June at the Mansion House, to discuss points in connection with this great subject. There cannot be two opinions as to the general advisability of establishing such hospitals in this country, and as was to be expected from the honourable desire of the medical faculty always to do what appears best for suffering humanity, we find that the scheme has the cordial approval of the presidents of the great medical bodies and the chief members of the profession in London, who agree that this is a much-needed institution.

Out of England, there are various examples of such hospitals, such as the State Hospital at Christiania, which is entirely supported by such paying patients; the famous Maison Municipale de Santé in Paris; and various institutions in Germany and the United States, where for a moderate fixed payment, men or women of limited means, or who have no home in a large city, can obtain adequate care and proper nursing in case of illness. The great French hospital, the Maison Municipale de Santé, is a model of what such an establishment should be. It is under the control of the municipal authorities, and has nearly six hundred beds ready for the treatment of sick and wounded persons of the class now alluded to, who, for a daily payment varying from four to twelve francs, can obtain medical and surgical advice—medicine, food, baths, and all else necessary for their proper alleviation or cure. There are two physicians and a surgeon on the staff of the hospital; but if the patients choose, they can call in consultation any of the Parisian hospital doctors, and the fees paid to them are the only extra expense that inmates are liable for. 'The hospital,' says Mr West, 'is clean, well-furnished, comfortable, and contains every variety of bath that the patients can possibly require.'

What a boon such an establishment would be, not only for the large numbers of clerks and

assistants in our shops and warehouses, who live in lodgings, and are far from the tender hands of a loving nurse, but also for a class who are anxious to have the advantages of a well-managed hospital and its careful nursing, rather than subject near and dear ones at home to all the trouble and anxiety of nursing and watching, besides the great risk of infection. There is certainly a strong and no doubt very natural feeling against the idea of being away from home when sickness overtakes us; but in process of time this dislike must yield to the undoubted fact, that in a well-organised hospital, a case has, as a rule, a far better chance than elsewhere of being thoroughly attended to according to the directions of the physician. The loving hands that smooth the pillow under the uneasy head need not be absent here; but it must be remembered that it is not given to every mother or wife to be a good nurse. Nervousness and inexperience, over-anxiety from the very great interest in the issues of life and death for the loved one, are often causes of risk to the patient. Then, too, house accommodation may be limited: perfect isolation of the infected patient, especially in the 'flats' of such a town as Edinburgh, may be well-nigh impossible; while the disease may be, like small-pox, of a kind that drives all but the most self-sacrificing of friends away.

In one of the many letters written on this subject we get a pitiable instance of such a case as this: A young man, living with a lady and her daughters, became ill with small-pox. His mother was dead, his father in India. When it was clear what disease he had, every one left him but one servant. His doctor sent him to a small-pox hospital, but it was full; and he had to be brought back again, and put under the care of a nurse from an Institution; but at ten P.M. this Mrs Camp was found to be quite drunk, and another had to be sent for. But how infinitely better would it have been if he could have been sent to a paying hospital. The present writer knew of a case some years ago that peculiarly illustrates the value of such institutions. A young married man of limited but not straitened means was seized with illness at home about a week before the 'fitting term,' at which time he was to remove his household goods to another town. The doctor pronounced it fever, and said that if he was to be removed at all, it must be immediately. It was absolutely necessary he should leave his house when his tenancy expired; and as they had no friends in town to whom to go, no course was open but to send the sick man to the public hospital; which was done. Here was a distinct perversion of the objects of such an institution; and though in this case some compensation was made in the form of a donation, yet here again, how much better for all parties if that hospital had had a wing, where he could have been taken in on the distinct footing of payment for its advantages.

Various proposals have been made as to the mode of instituting such hospitals. Sir Rutherford Alcock is in favour of a certain number of wards in good existing hospitals being set aside for the accommodation of paying patients at varying rates, to suit their varying means; others advocate the building of distinct wings or pavilions to existing hospitals; while many think that buildings separate in every way should be specially built. The

advantages in favour of connection are that in these hospitals there is already an organised staff of physicians, surgeons, and nurses; and that while the extra expense of an expansion of this staff would be comparatively small, the payments from the new class of patients would largely help the funds of the hospital in its charitable purposes. It is probable, however, that a distinct institution—an 'Hotel Hospital' it is proposed to call it—will soon be set on foot, as a limited liability company is spoken of for the purpose.

The London *Figaro* some time ago advocated the establishment of dispensaries where a man of the middle class could get for a small fee first-rate medical advice. In this material respect the workman is decidedly better off than the struggling member of the middle class, who, if he has to consult a leading physician, must pay fees beyond what he too often can afford, while to the poor man the highest medical advice in the kingdom is as free as the air he breathes. The *Figaro* shows how this would be not only a great advantage to middle class people but to the medical profession, in which at present many young men have to be content with a local practice, because they have no opportunity for obtaining hospital practice, which is so necessary for qualification as a general physician.

DIAMOND CUT DIAMOND.

A GRANDFATHER'S STORY.

ABOUT sixty years ago I was in Paris for the first time in my life. Bonaparte still lingered at St Helena; and the adventurers, good, bad, and indifferent in character, who had served in his armies had not yet lost all hope of the return of their idol, and consequently had not yet thought it worth while to settle down into thorough peace and quietness.

Young Paul Ferrand, whom I frequently met at the café, and who had served as a captain at Waterloo, was sure that the Little Corporal would come back again soon. 'You have not yet beaten him,' he would tell me laughing. 'You sent him to Elba, but he returned; you have sent him to St Helena, and he will return again. We shall see.'

Ferrand was an exceedingly nice fellow; and although he professed to cherish an unquenchable hatred for England and everything English, he had, by some means or other, become attached to Alice Rae, a young English lady of my acquaintance, and who had been living with her mother since the conclusion of peace at Paris, not far from the abode of the ex-captain. And he was always very friendly with me too. He would, it is true, abuse my countrymen most unmercifully; but he was always particularly good-natured; and whenever he found himself saying a little too much, he would arrest himself and apologise so heartily, that I never could be angry with him. I was alone in the French capital, and had few friends there except Mrs Rae, her daughter Alice, and Paul; and so it happened that I passed a good deal of my time in the society of these three. The mother, a woman still in the prime of life, and the widow of a king's messenger, was a connection of mine by marriage, and that fact gave me a good excuse for offering my services as escort whenever she and her pretty daughter thought fit

to go to the theatre or the opera. At such times Paul always had a seat in the stalls; and between the acts he would come up to my box, to the delight of Alice, who was in love with him, and to the no small satisfaction of Mrs Rae, who herself had quite a maternal affection for the young Frenchman, and did not in the least discourage his attentions to her daughter. If there were no formal engagement between the two, it was at least perfectly understood by all parties that as soon as Paul should get an appointment, for which at the time he was a candidate, he was to marry Alice; and I, though only a few years her senior, was to give her away.

One night the opera-house was crowded more than usual. A great singer was to appear, and a new work by a renowned composer was to be performed. But Paul Ferrand, sitting in the stalls, seemed scarcely to listen to the music or to notice the acting; and much more often were his eyes turned in the direction of my box than in that of the stage. Alice and her mother were with me; and as the curtain fell at the conclusion of the first act, Paul came up to us. He was in high spirits, for he had heard that the minister had decided to give him the coveted post, and he expected to hear in a few days that his appointment had been signed by the king. We congratulated him; and as he left us to return to his seat, I whispered to him: 'You'll be a happy man in a month or two now, Paul.' He smiled, and shut the door.

We watched him as he threaded his way to his place. It was in the centre of the second row from the orchestra, and he had left his opera-glasses on the chair, in order to preserve his right to it; but during his absence a tall, military-looking man had appropriated it, and had coolly put the glasses on one side. Paul approached the stranger with the utmost politeness, and I suppose, for naturally I could not hear, requested him to move. The interloper did not deign to answer, but sneeringly looked up at Ferrand, as though to ask him what he meant by his intrusion. Paul pointed to the opera-glasses; but the stranger neither replied nor moved, but continued to appear as though he did not hear. I saw that matters were assuming a dangerous complexion, for in the new-comer I recognised Victor Laroquière, an ex-Bonapartist officer like Paul, a notorious bully, and one of the most celebrated duellists in France. But what could I do? I could only sit still, much against my will, and witness the inevitable consequences. I thought Alice would faint when Laroquière in the calmest way rose before the crowded assemblage and struck Paul in the face with his glove; but she recovered herself, and like a statue watched her lover pick up his opera-glasses, bow to his insulter, and without a word, leave the building. There were some exclamations from the audience; but the duellist again rose, and with a theatrical air gazed round, mockingly imitated Paul's parting bow, and resumed his seat. This was too much for poor Alice. She could not remain any longer; she must go home; and so, with some difficulty, I got her and her mother to my carriage, told the coachman to drive them home, and myself walked quickly to Paul's lodgings.

He had arrived before me, and was already writing when I entered his room. 'Of course,' he said, as he saw me and came towards me with

both hands outstretched, 'you, my dear friend, will assist me. It is impossible to do anything but fight. Even Alice could not make me alter my conviction upon that point; the insult was so public.'

'Suppose you leave the country?' I suggested. 'Then I should have to give up the appointment and Alice too. No, my dear fellow, I am a Frenchman, and I must fight; and you must arrange matters for me. If he shoots me, it cannot be helped; if I shoot him, I shall have shot the biggest scoundrel in Paris. I beg you to call upon Laroquière to-night. I have already discovered his address. Here it is.'

'But must you really fight? It is suicide to fight with a professional duellist.'

'Ah,' he said, shaking his head, 'I am afraid it is suicide; but I must fight; so please don't try and persuade me that I need not. And I will fight, too, as soon as possible. You can arrange everything for to-morrow morning. I must have the matter over. In a day or two I might be a coward.'

By his looks he implored me to go to Laroquière; and constituted as French society was at that time, I had no other course open to me than to do as he wished.

'If Monsieur come from M. Paul Ferrand,' said a man-servant when I inquired whether I could see his master, 'M. Laroquière has sent to say that he has not yet left the opera. He has, however, sent this pencilled note, which I am to give to the gentleman who comes from M. Ferrand.'

I tore open the missive. It contained two cards, one bearing the name of the duellist, and the second that of M. Fernand Delarue, Rue Vivienne 18. Certainly it was an off-hand way of acquainting me with the name and whereabouts of Laroquière's second; but as I wished to pick no quarrel, I walked on to the Rue Vivienne, and in a few minutes was ushered into the presence of M. Delarue himself. This worthy was a young man, aged about three-and twenty, and dressed in the very extreme of fashion. His ruffles were immaculate, and most symmetrically arranged; his lace handkerchief was steeped in essence; his gloves, which lay on the table—for he had only just returned, at Laroquière's request, from the opera—were small and delicate; his fingers were covered with valuable rings; and the bunch of gold seals depending from his fob was unusually heavy and brilliant. He did not strike me as appearing particularly warlike; but nevertheless, after formally saluting me, he at once touched upon the object of my visit; and before I had been ten minutes in his company, had arranged to meet Ferrand and myself at a certain spot, dear to duellists of the time, at an early hour next morning, and to bring Laroquière with him.

'I don't think we shall need a surgeon,' he said to me quite affably at parting; 'but if you please, you can bring one. In his last affair my principal shot his man through the temples, and he died immediately. I sincerely hope, Monsieur, that your friend is as clever.'

'Confound the fellow!' I said to myself as I left the house and sought the residence of my own medical man. 'I am afraid poor Ferrand is not such a consummate murderer as Laroquière.'

After seeing the surgeon, to whom I briefly explained matters, I called upon Mrs Rae. She

was doing her best to comfort her daughter, who was in the greatest possible distress. 'Are they going to fight?' she asked me.

'My dear Alice,' I said, 'they are. I have done my best to dissuade Paul; but he says, and I am obliged to agree, that he must fight. Let us hope for the best. He has a sure eye and a steady hand, and he has right on his side. The other man is a scoundrel. And you must remember that poor Paul is not an Englishman. If I were he, I would not fight; but as it is, the matter cannot be overlooked, and indeed everything is arranged.'

'You are to be with him?' said Mrs Rae, looking as white as a sheet.

'Yes; they are to meet to-morrow morning, and by breakfast-time Alice's suspense will be over. She must bear up.'

'You must prevent the duel,' sobbed the half-heart-broken girl. 'Cannot Paul let the insult pass? But no; it was so public.'

'You can only hope,' I said. 'I will see you in the morning; but now I must go back to him, and see that he gets some sleep.'

'Tell him,' cried Alice, 'that if he is killed I shall die. Come here directly it is over. Come, even if he falls; you must tell me about it. I must hear everything.' She buried her face in her hands; and I, escaping from the unhappy girl, hurried to Paul.

He was still writing, and his hair was in disorder, and his face pale when he turned towards me. 'I am no coward,' he said, 'but I am saying good-bye to her, for I shall die to-morrow.'

'My dear fellow,' I exclaimed, 'you will shoot Laroquière, and be married next month. You must finish your writing at once and go to bed. I will sleep here to-night, for I must see that you turn out in time to-morrow morning; so be as quick as possible.'

He wrote for another half-hour, addressed the document to Alice Rae, placed a lock of his hair within it, and after sealing it up, gave it to me.

'Give that to her,' he said, 'if Laroquière kills me outright—and I know he will. If it were not for Alice, I declare that I should be quite glad to meet him. Now for bed.'

He undressed; whilst I lay down on the sofa in the next room and lit a cigar, for I could not afford to sleep myself. Soon all was quiet, and I stole in to see Paul lying as quiet as a child with a smile on his face. Probably, nay assuredly, I passed a more uncomfortable night than he did. Only with the greatest possible difficulty could I keep awake; and the hours seemed to linger for ever. At last, however, daylight dawned, and I called Ferrand, who woke refreshed and in comparatively good spirits. After a hurried breakfast we undressed ourselves up; I placed a flask of brandy, some powder and bullets, and a brace of pistols in my pockets, and we sallied forth in the cold morning air. Scarcely any one was abroad, except a few sleepy watchmen, who seemed to make very slender guesses at the object of our expedition; and through the silent streets we went for a mile or so, until we reached the meeting-place.

Laroquière and Delaraie were there before us, and my friend the surgeon arrived immediately afterwards in his carriage, which waited near at hand. The pistols were produced and loaded. Laroquière chose one, and I gave the other to Paul; and then the two men took up positions at

a distance of twenty paces from each other, and waited for Delaraie to give the signal to fire.

'Stay!' cried the bully, as his second stepped back; 'let the young hound listen to this. I am not trifling with him: I shall shoot him only where he wishes, for I am generous, parbleu!'

'If I do not kill you,' said Paul quietly, 'I prefer to die.'

'Then I shoot him through the heart,' coolly observed Laroquière. 'It will teach others not to challenge me.'

There was something to me unspeakably horrible in the way in which these last words were pronounced. I shuddered, and looked at Paul. He smiled at me, and at the same instant Delaraie gave the signal.

There was but one report, for Ferrand's pistol flashed in the pan. The poor fellow turned round towards me with fixed eye and pale face, and with the name of Alice on his lips, fell dead. Laroquière turned on his heel, and departed quickly in company with Delaraie, while I aided the surgeon in his brief examination of Paul's body. Surely enough, the bullet had passed through his heart. He must have died almost instantaneously, for he did not move after he fell, and the last smile with which he had looked at me was still upon his face. It was a melancholy business in every respect. I had to break the sad news to Alice and her mother; and the two ladies were so terribly overcome, that I feared the shock would have some permanent effect upon their health. For my part, I was obliged to hurry to England as soon as possible; and Laroquière, I heard, also got away, and remained out of France until the affair had blown over.

I kept up a correspondence with Mrs Rae, and was glad after a time to hear from her that Alice, though still terribly upset, had learned to look with a certain amount of philosophy upon her misfortune, and had to some extent recovered her usual health, if not her usual spirits. Meantime I settled down in London, and unable to forget my Parisian habits, usually dined at one of the then much frequented taverns in Fleet Street. The *Cheshire Cheese*, which was then in much the same state as it is now, was my favourite haunt; and there, as months passed by, I gradually picked up a few pleasant acquaintances, chief amongst whom was an extremely well-mannered young gentleman named Barton, a man of independent means, good family, and first-rate education.

One day, after he had been dining with me, the conversation turned upon continental manners and particularly upon duelling. As an illustration of my abhorrence of the system, I told my companion about poor Paul's death, a matter in which Barton appeared much interested. He asked me a good many questions about the parties concerned, and after expressing a remarkably strong opinion to the effect that Laroquière was a blackguard, bid me good-night. I went home to my rooms in the Temple; and next day, on visiting the *Cheshire Cheese*, found no Barton. He had left word with one of the waiters that urgent business had called him away, but that he hoped to see me on his return. Weeks passed, and then months, and still Barton did not come back; and I confess that I had begun to forget him altogether, when one evening he dropped into dinner as though he had not been absent for more than a day or two.

'Where have you been?' I asked, after I had heartily shaken hands with him.

'I have been to Paris,' he said. 'On arriving there I found out a little more than you told me about Laroquière, and when I had thoroughly convinced myself that he was the blackguard you painted him, I arranged for a series of lessons at a pistol-gallery. Every day for a month I went and shot for an hour or two, until I was so perfect as to be able to hit a small coin every time at a distance of twenty paces. After satisfying myself as to my proficiency, I took a box at the opera; it may have been the same box that you used to have. Laroquière was pointed out to me. He sat in the stalls, and between the acts he left his seat in order to speak to a lady in another part of the house. I descended as quickly as possible and took his place. He returned, and asked me in an overbearing tone to move. I refused. He persisted. I struck him. He sent me a challenge, and we met upon the same spot, curiously enough, where he had killed your friend Ferrand. Before the signal was given, I said: "M. Laroquière, listen to me. I am not here to trifle with you: but I am as generous as you were with Paul Ferrand. I will shoot you only where you wish." He turned deadly pale. "We will see," he said, "whether I shall not make you a second Ferrand!" "Then I will shoot you," I returned, "as you shot him—through the heart. It will teach other bullies not to challenge me." Whether he was so upset as to be incapable of aiming or not, I cannot say; but my dear fellow, I shot him as dead as a dog, right through the heart, and avenged your friend, at the same time ridding Paris of its biggest villain. It was a case of diamond cut diamond.'

'Well done, Barton!' I exclaimed.

'Wait,' he said, 'and let me finish the drama. We managed to keep the matter very quiet; and before leaving France, I was able to call on Mrs. Rae, who is now at Boulogne, for I had a letter of introduction to her from a Parisian acquaintance. When I saw her first, she knew nothing of the affair, but at last I broke the intelligence to her and to her daughter. I found Alice to be a pretty girl, somewhat spoilt by her long mourning, and not very much inclined to listen to me; but my dear fellow, after three weeks of hard persuasion she gave in, and now she and her mother are coming over next week. I believe you were to give Alice away. When she arrives, you shall have a capital opportunity.'

'And,' I added, shaking my friend's hand warmly, 'I shall be delighted to do so.'

MODERN SUPERSTITIONS.

Most people accept it as a fact that superstition went out with the advent of steam, the telegraph, and the penny-post. A little honest observation, however, will assure us that there still exist a number of pitiable though petty superstitions. Among certain classes there are lucky and unlucky days in their calendar. They will not attempt an important task on Friday. The horse-shoe still hangs behind or over the door in the Highlands, and in some places much less removed from the centres of civilisation. East-coast fishermen will yet occasionally burn or otherwise

destroy a boat from which the lives of any of the crew have been lost, no matter how seaworthy or valuable the boat may be. A hare crossing the path of one of these hardy sons of the sea will cause him to forego an intended journey or voyage. To rustic and fisherman alike a concourse of magpies is an evil omen. As for dreams, the belief that they are the forecasts of events is perhaps the strongest of all the forms of their superstition. We might multiply examples, but have said enough to suggest that the follies of their great-grandfathers have still no slight fascination for the ignorant, in spite of the strides which intelligence has made.

But have superstitious beliefs quite left the more intelligent ranks of society? On the very subject of dreams itself is there not a sneaking credulity which goes far to prove the contrary? True, any one of us is quite able to account in a natural way for the character of his or her dreams. Nevertheless, the lady who chides her children for repeating the interpretation which the housemaid has put upon their sleeping vagaries, and sagely instructs them on the subject of imperfect digestion and its effects upon the brain during sleep, is not ashamed to impart to her husband any morning the particulars of her own shocking dreams, or to piously express the hope that something untoward is not about to happen. Her better-half pool-pools the matter doubtless, as becomes his superior dignity, but is visited none the less with a vague sense of uneasiness when he remembers that he himself had a vision of losing a tooth or seeing a house on fire. Having courageously quizzed his wife at the breakfast-table on the folly of her angry, and bade her and the children good-bye for the day, he inwardly deplores the unlucky omen of having to turn back for his forgotten umbrella or pocket-book!

How many curious but innocent little customs too are still current, and with the sanction of the wisest. An old slipper is still cast after a bride: it is considered necessary to christen a new ship with a bottle of wine: a fine day is still royal weather; and so on. These and many others most of us would indeed be sorry to see extinct. They are not only harmless, but in their very departure from strait-laced common-sense, give an agreeable and perhaps even healthful relief to the prosiness of ordinary life. To sacrifice them to the strict letter of reason, would be to sacrifice much of the sentiment of life, to banish imagery from poetry, to take the perfume from the rose, to guide into a Dutch canal the current of human affections, which left free will gush and eddy, prattle and murmur by rock and meadow, carrying music and health throughout its living course.

Would that modern superstitions never took less innocent shapes! Having discarded the ghostology of olden times, many people, and among these some men and women of considerable culture, have set up for themselves a novel system of intercourse with the unknown world. Brownies and fairies, with all the fine romance that surrounds the history of their doings among human folks, are dismissed with contempt. Spiritualism has swept all these ethereal puppets off the boards of ordinary life. To substitute what? We might at least look for an improved exhibition and more interesting

'characters;' but the truth is that nothing could be less satisfactory than the modern attempt at demon-craft. There is something so clumsy and inert in the whole get-up of the 'spiritual' drama, that it is less surprising to find it very generally scouted than to see it obtain even a partial notoriety.

Ignorance is the parent of superstition, without a doubt; and the one never exists apart from the other. There is, however, a second wise saw that tells a great deal of the truth about the origin of that world-old bugbear of the human mind, namely, 'The wish is father to the thought.' What we strongly desire to be, we are next door to believing to be. The appetite of man's vanity is unappeasable, and in catering for it his fancy plays tricks with his reason. He longs for intercommunication with the unknown, and indulges the wish by creating fictitious agents for that purpose. Tokens, signs, omens, and auguries are also outgrowths of the various forms of desire and vanity. We believe we shall have luck if we turn the money in our pocket when looking at new moon. Men have waited in all ages for the appearance of some favourable sign before beginning any enterprise of importance. If the sun shines on our wedding-day, how auspicious! Palpably in each case because we desire these things to be! But having set up omens with such an object, we, in the cleft-stick of our own superstition, are bound to believe their absence or converse, the fore-shadows of evil.

In many ways modern credulity frees itself from such mechanical trammels as those we have mentioned, to take a form and complexion from the age, losing meanwhile not one jot of its vigour. To dream three times of a hidden treasure and set about, Whang-the-Miller-like, to lay bare the foundations of one's house, is an exploit not to be thought of by the veriest wisacre of our day; but the desire to obtain wealth easily and rapidly being, if anything, more active and rampant, the belief in some magical means for attaining it is the most natural thing in the world. An Eldorado is required, and lo! an Eldorado is implicitly thought to exist. The projectors of a bogus company for 'utilising the clippings of old moons' or 'extracting starch from granite chips' are the good fairies whom by propitiating with a portion of our substance we hope to enlist in our behalf, and obtain a thousand-fold return. Where such a superstition exists, and it is broadcast, any scheme however absurd, any swindle no matter how transparent, will serve for a bait to catch the unwary and over-eager fish. Nothing is so purblind as undue acquisitiveness. The ancient Highlander with his keen eye to the main chance and happy facility for 'attaching' whatever came in his way, found a beautiful horse in rich trappings, browsing ownerless in his path, and following the instinct of his desire rather than the prudence which tradition should have taught him, rashly mounted. In an instant he was borne aloft, then plunged for ever beneath the dark waters of a tarn on the back of the wily and terrible water-kelpie. We too have our illusory steeds in this so vaunted age, and neither the teachings of history nor the bitterest experience seems able to prevent the speculator from vaulting into the saddle, and forthwith launching into perdition.

Charms are things of the past, or believed in

merely by the vulgar; that is to say, those pretty and fanciful conceits which led our ancestors to attach a healing or sanitary virtue to certain objects and ceremonies are now almost extinct. A spray from the rowan-tree is no longer a safeguard against an epidemic, nor the hand of majesty a cure for scrofula. Ladies do not now believe that the presence of a piece of cold iron on their couch, '*while uneasy in their circumstances*,' will secure a happy consummation; nor is a child's caul in much request in these days as a protection against fire and drowning. True, we have got over these beliefs pretty thoroughly. But is the desire for infallible remedies and potent protectives done away with also? Not in the least; and though science is doing its best to provide honest substitutes in a natural measure, the public is not satisfied with its efforts. Quacks are the modern magicians, and quack medicines the charms of latter days. Those who are bald, for instance, will not accept their fate while a single well-puffed elixir with a Greek name remains untried. There is something saddening if not sickening in the evident success which attends the pretences to cure chronic and irremediable diseases, to effect miracles in short with the most trumpery of means and execrably silly devices. Our forefathers were imposed upon no doubt, but there was method in their madness. The 'simples' with which spae-wives and charlatans professed to cure ailments were in many cases effective and now recognised drugs, and were at the worst perfectly harmless; while the rites with which they were administered, if quite apart from the purpose, yet appealed gracefully to the imagination. Nowadays, however, the 'simples' are the patients and not the medicines! The old story. Child-like, the age cries for something that it cannot get, rejecting the good that is within reach.

In a recent number of this *Journal* we had occasion to refer to the amazing credulity of Americans on the subject of professional 'mediums.' The worst of it is that the extent to which this has been laid bare is insignificant compared with that which really remains unexposed. The desire to work with supernatural tools in effecting the paltriest and meanest of human ends would seem to have divided a people of accredited shrewdness into the two classes of rogues and dupes. But as we have seen, we too have been singled at the same fire. There are, moreover, other, if minor superstitions in our midst that suggest the propriety of beginning the task of reformation at home. An occasional glance, for instance, at the stock advertisements of leading journals will convince any one how widespread is the infatuation that believes in spurious offers of advantageous employment. Some of these have, under our own observation, been repeated with little variation for more than twenty years; and we have no doubt that the wily advertisers are able to calculate to a fraction the number and gullibility of their dupes. We have from time to time drawn attention to swindles of this class, as well as to those tempting offers of 'Money to Lend,' which appear with equal regularity in newspaper columns. We are afraid, however, that friendly warning and experience are alike unavailing to stem the mischief. The spread of education itself would appear unable to outstrip the spread of

impotence or the eager credulity that supports it; for superstition merely shifts its ground from time to time, without losing appreciably its original dominion over the human mind.

ODD MISTAKES AND MISCONCEPTIONS.

At the last Christmas race-meeting at Ellerslie, New Zealand, just as the course was being cleared for the event of the day, uproarious sounds of merriment arose behind the saddling paddock, and a number of sailors belonging to Her Majesty's ship *Sapphire* were seen scurrying along, a star-wart blue-jacket in their midst bearing in his brawny arms the form of a woman. No screams resounded above the din created by the abductors; but nothing doubting that the capture was an unwilling one, a gallant newspaper editor and a detective, eager to aid beauty in distress, started in hot pursuit, and after a smart chase across country, overtook the miscreants. To the officer's stern demand for the instant release of their fair prisoner, the tars replied by dropping their prize, whereupon the brave rescuers, rushing forward, tenderly raised the prostrate figure. Judge, however, of their feelings of mortification upon being told by the sailors that having at the interesting game of Aunt Sally, fairly demolished the old lady's pipe, and the accustomed sixpence for the adroit achievement not being forthcoming, they had carried off the old lady in reprisal!

For a dressed-up doll to be taken for a lady seems as improbable as that a lawyer should be taken for a thief, but even that has happened—so liable are men to be led away by appearances. Daniel Webster travelling by the night-stage from Baltimore to Washington with no companion save the driver, contemplated that worthy's forbidding features with a very uneasy mind. He had nearly reasoned his suspicious fear away, when they came to the dark woods between Bladensburg and Washington, and Webster felt his courage oozing out of his finger-ends as he thought what a fitting place it was for murder. Suddenly the driver turned towards him and gruffly demanded his name. It was given. Then he wanted to know where he was going.

'To Washington; I am a senator,' said Daniel, expecting his worst thoughts were near realisation. The driver grasped him by the hand, saying: 'How glad I am, mister, to hear that. I've been properly scared for the last hour; for when I looked at you, I felt sure you were a highway-man.'

Upon another occasion a young gentleman accosted a stately looking personage at a Washington wedding reception with: 'Good-evening; I'm delighted to see you; we have not met since we parted in Mexico.'

Ignoring the overstretched hand, the gentleman addressed said: 'I fear you have the advantage of me.'

'Why, is it possible you don't recollect me?' exclaimed the mortified young fellow. 'Certainly I was much younger when I was in Mexico with my father.'

'To tell the truth,' said the other, 'my remembrances of ever being in Mexico are very indistinct.'

'Are you not Sir Edward Thornton?' inquired the puzzled one, beginning to suspect there was

a mistake somewhere; a suspicion becoming a certainty when the reply came: 'By no means; I am Judge Poland, of Vermont.'

A few nights after this rebuff, the youth happened to be at another party, and seeing the judge there, made up to him, and after a word or two about the weather, observed: 'That was an awkward blunder of mine the other evening, to take you for old Thornton!'

'And whom do you take me for now, may I ask?' was the reply.

'Why,' said he, feeling rather bewildered by the other's manner, 'you told me you were Judge Poland, of Vermont.'

'On the contrary, sir, my name is Thornton,' was the annihilating response.

The victim to this case of awkward disability was not so much to be pitied as his fellow-countryman Slimmer, who fared worse from a similar mistake that was none of his making. Slimmer, a modest young bachelor, peeping into the ladies' waiting-room at a railway station, found a pair of plump arms round his neck, a lady's head resting lovingly on his manly bosom, and half-a-dozen youngsters of nicely graduated sizes clasping his legs, tugging at his coat-tails, and crying 'Papa!' at the top of their voices.

While the half-strangled victim was struggling to disentangle himself from his affectionate surroundings, a gentleman rushed into the waiting-room, took the situation in at a glance, floored the innocent Slimmer with his carpet-bag, and then sat upon him. When he came to himself he was in bed in the infirmary, a bruised and battered bachelor; and all he got for his pains was a grumbling apology from his assailant for the unfortunate mistake his wife had made. The common lot of sufferers from the mistakes of such over-hasty folk.

Jealous-minded people are particularly prone to misconceptions involving serious results. The captain of a schooner trading between San Francisco and Mexico left his wife in a tenement house in San Francisco. He had been away some twelve months, when one night as his wife was nursing the baby of a *neighbour*, the door of her room opened, and she saw her husband standing looking at her. She rose to greet him; but repulsing her with an oath, he turned on his heel and was gone, leaving her to cry herself to sleep. A knock at the door awoke her. Before she could reach it, her husband was in the room, his hand at her throat. Dragging her shrieking to the window, he would have thrown her from it; but her cries had drawn a crowd in front of the house, and the unhappy woman managed to extricate herself from his strong grasp, only to feel a knife enter her flesh, and to fall senseless to the ground. The infuriated seaman made for the stairway, where he was met by a crowd of men. Threatening to shoot the first who came near him, he smashed in a door of a room, jumped through a window, and although pursued, reached the Chinese quarter, and was lost in its labyrinth. The occupant of the room through which he had dashed so unceremoniously, hearing the commotion without comprehending it, sprang out of bed and fired a shot; upon which somebody outside in the hall fired another. 'Lynch him!' was the cry; and in a very short time the guiltless occupant of the room was under a lamp-post, and would have been

dangling from it but for the intervention of the people about, who assured the excited mob that the actual assailant of the woman was already beyond reach. The woman was not killed; but whether her hasty mate discovered his mistake and atoned for it, is not recorded.

Not so tragical in consequence was another instance of jumping to conclusions. A blushing damsel of forty summers or so entered the town-clerk's office at Wheeling, West Virginia, and asked for a license. The clerk took down her name and address and asked for that of 'the other party.' 'Faithful; he lives with me,' said the applicant. The clerk eyed her curiously, but keeping his thoughts to himself, filled up the paper and handed it over. The lady glanced at it, shrieked out 'Monster!' and swept out of the office, leaving the offender dumfounded at the explosion; till it flashed upon his mind that possibly a dog license, not a marriage license, was what the spinster wanted.

Equally unhappy in interpreting a lady's meaning was a timid young man of Titusville. Calling upon a pretty girl one evening, she said: 'I want to propose to you.'—

'You are very kind,' gasped the alarmed visitor; 'but I am not worthy of such happiness; in fact none of our family are marrying people—besides, my income is limited, and I have to meet a friend, and I'm afraid I'll be late.' He was making his exit without waiting to put on his overcoat, through the door of a cupboard.

'Why,' said the young woman, 'I wanted to propose to you to accompany me as far as Main Street; that was all.'

'Oh, in that case,' answered the relieved gentleman, 'I shall be only too happy.'

Ladies should eschew ambiguous expressions, and ambiguous actions for that matter. A lady visiting a great public library for the first time, grateful for the assistance rendered her by an assistant-librarian, slipped half-a-crown into his hand; of course the gentleman immediately returned it whence it came; and by-and-by had the pleasure of overhearing one of his fellows say to another: 'Well, I saw it all, but can't make out whether he was making love to the lady or the lady to him: but they were squeezing each other's hands!'

Mr Sayre of Lexington was troubled with a lisp. One day the overseer of one of his farms came to headquarters to say he wanted some porkers. 'Very well,' said Mr Sayre. 'Go and buy four or five thowth and pigth, and put them on the farm.'

The man inquired if he should take the money with him to pay for them.

'No,' said Sayre; 'they all know me. Thend them here, and I'll pay.'

In a fortnight's time the overseer reappeared with the information that he had been all over the country, but could not get more than nine hundred pigs.

'Nine hundred pigth!' exclaimed his employer. 'Who told you to buy nine hundred pigth?'

'Why, you did, sir,' said the overseer. 'You told me to buy four or five thousand pigs; and I tried to do it.'

'I did no thuth thing,' said Sayre; 'I told you to buy four or five thowth and their little pigth; a pretty meth you've made of it!'

Among the many good stories told by Colonel

Stuart in his *Reminiscences of a Soldier*, are the two following. A sentry at Chatham, when the captain of the guard questioned him as to his orders, replied: 'My orders are, sir, if a fire broke out, I'm to take my musket and shoot the nearest policeman.' The officer suggested he had made some mistake, but the soldier stuck to his text; and with 'I pity the policeman,' the captain of the guard walked on without giving the correct instruction: 'If a fire breaks out, fire your musket, and alarm the nearest policeman.'—A Scotch subaltern at Gibraltar was one day on guard with another officer, who falling down a precipice, was killed. He made no mention of the accident in his guard report, leaving the addendum, 'N.B. Nothing extraordinary since guard-mounting,' standing without qualification. Some hours after the brigade-major came to demand an explanation, saying: 'You say, sir, in your report, "Nothing extraordinary since guard-mounting," when your brother-officer, on duty with you, has fallen down a precipice four hundred feet and been killed.' 'Weel, sir,' replied he, 'I dinna think there's onything extraordinary in it: if he'd faun doon a precipice four hundred feet and no been killed, I should hae thought it verry extraordinary indeed, and wad hae put it doon in my report.'

Taking things too literally is a fertile cause of amusing blunders. Two costermongers claiming proprietorship of one donkey, went to the Westminster county court to get the dispute decided. After hearing a part of the evidence, the judge said they had better settle the case out of court during the adjournment for luncheon. Upon the court reopening the defendant told His Honour it was all right; the donkey was his. Turning to the plaintiff, the judge saw his personal appearance was altered for the worse; but before he could put any questions, the defendant went on to say that they had found a quiet yard to settle it in, as His Honour had suggested. He had been rather rough on the plaintiff, but couldn't help it; they had only half an hour to pull it off in, and plaintiff was a much tougher customer than he looked to be. The explanation was conclusive, if not quite satisfactory to the court, and the donkey became the prize of the victor in the fight.

'Come up to the Capitol while we are in session, and I'll give you a seat on the floor of the House,' said a member of Congress to one of his supporters, who called upon him in Washington.

'Wall, no; I thank you,' said the West Virginian; 'poor as I am, I always manage to have a cheer to sit on at home, and I ha'n't come here to sit on the floor.'

A doctor, called in for the second time just in time to save the life of a man who during fits of intoxication was given to dosing himself with laudanum, rated his patient roundly for a good-for-nothing scoundrel, who, if he really intended to kill himself, should cut his throat and have done with it. One night the doctor's bell was pulled. Putting his head out of window, he saw the self-poisoner's wife, and heard her call out: 'He has done it, doctor.' 'Done what?' asked he. 'John has taken your sensible advice,' replied the woman; 'he has cut his throat, and will save you further trouble!'

The American poet must have been either very angry or very much amused, when his note to a friend, 'Come and see me; I am at

Barnum's—meaning the hotel of that name in New York, elicited the answer: 'I am sorry you are going to exhibit yourself. If you had stuck to literature you would have made your mark and fortune. Whereabouts is the show now?' Ill-natured people might suspect the mistake was wilfully made. We should be sorry to suppose anybody capable of thinking the same respecting the extraordinary misconception under which an eminent divine laboured at a dinner-party. He was so dull and silent that the lady next him expressed her fear that he was unwell. 'To tell the truth,' said he, 'I am not quite the thing; I have a presentiment that a serious illness is hanging over me—a peculiar numbness all down my right side seems to forebode paralysis; for I have been pinching my right leg all dinner-time, and can elicit no responsive feeling whatever; the limb seems dead.' 'If that is all,' said his fair neighbour, with a good-natured smile, 'you need not alarm yourself: the leg you have been pinching all the evening belongs to me!'—Honi soit qui mal y pense.

A FEW FRENCH NOTES.

Our lively neighbours, as journalists still sometimes delight to designate the practical, money-getting French of post-imperial days, have learned much in the stern school of adversity. Saddled with a weight of taxation that might crush the spirit and cripple the energies of a more robust race, they show wonderful elasticity in developing new and unexpected sources of national wealth, and leave no stone unturned the turning of which may yield a profit.

If there was one branch of industry the revival of which seemed hopeless, it was the home manufacture of kelp, virtually driven out of the market by South American barilla. At its best the kelp trade had but helped the inhabitants of the Hebrides, the western Highlands, and other barren shores, to eke out a scanty livelihood by burning the sea-weed that the waves washed to their feet; while the preparation was primitive enough to have dated from the days of Ossian's shadowy heroes. Science, however, embodied in the form of M. Emile Moride of Nantes, has seriously taken in hand the task of utilising the heaps of wreck-weed that strew the bleak Breton coast, so as to derive the highest return for labour and capital invested. With the aid of a portable furnace, a ventilator or set of bellows for continuous blast, and two wheelbarrows, M. Moride provides for the cooking of his raw material. The furnace is built of dry stones, wrapped round in fresh wet weed, and is supplied with apertures which promote the rapid cooling of the 'sea-weed charcoal,' so called. The ventilator insures quick combustion; but the beauty of the process is that the bromine and iodine, apt, in the old-fashioned method, to be lost through over-roasting, are now preserved. There are at Noirmoutier alone two hundred of these furnaces at work, producing two million gallons of carbonised weed. Each furnace earns its annual fifteen or twenty pounds sterling, supplying as it does soda, potash, and other chemicals to the wholesale druggist, along with phosphates and salts of lime invaluable to the farmer. The pecuniary advantage over the ancient system is roughly estimated at sixty per cent.

France, which exports so enormous a number of eggs, is naturally desirous to content her chief customers, ourselves, by sending over the fragile freight in good preservation. Rubbing the shells with butter, lard, or moistened gum is the mode hitherto practised, but the grocer's stores have never quite rivalled the fresh products of the hen-yard. They may do so now, if we are careful to follow the advice of M. Durand, the Elis chemist. He coats over the shells of his new-laid eggs with silicate of soda, lays them separately to dry, being heedful that no speck of surface remains accessible to air, and consequently to decay, and stows them, for a year if required, in a cupboard. M. Sace of Neuchâtel, a Swiss chemist, not a French one, is reported to achieve as much by the help of paraffine.

Should we have the ill-fortune to be half-drowned, suffocated by unwholesome gases or vitiated air, or to fall down in a fit, Dr Woillez is ready with his new apparatus for artificial respiration. The patient's person, all but the head, is placed in a cylinder of iron, from which one stroke of a powerful pump extracts the air; the lungs and chest of the sufferer expanding as the vacuum is formed. Eighteen such mechanical breathings can be produced in the minute, and at each of these a quart of air—double the quantity inspired in normal health—rushes in to oxygenate the blood. The *spirophore* is beyond all doubt a potent agent in serious cases, but some cautious surgeons have expressed fears as to the secondary results which might attend its use.

Nothing but praise can be bestowed upon the successful efforts of M. Lenoir to construct a looking-glass which should neither grow yellow, and give us back a billious presentment of ourselves, as silvered mirrors do, nor destroy the health of the workman, as was the case in the old process of mercurial amalgamation. The new glasses are backed with silver, washed with quicksilver certainly, but in solution not in vapour, and therefore innocuous to those who handle it.

Alcohol, as we know, can be distilled from almost anything; but Apothecary-Major Ballard, of the Cherchell Hospital, in Algeria, deserves some notice for finding out that Barbary figs, so called, will yield it in profusion and of excellent quality. The stoniest tracts of North Africa are indeed dappled with the flaming red blossoms of the prickly pear or cactus, and the fruit, guarded by its thorny envelope, can be had for the gathering. One ton and a half of these wild figs will give about sixteen gallons of colourless alcohol, at eighty-five degrees, and with a *hirschmuss* flavour. The same weight of beetroot yields but fifteen gallons of the far weaker spirit in common commercial demand; while beetroot, an exhausting crop, can only be grown on the best and most highly cultivated land.

The most enthusiastic advocates of ballooning would have hesitated to declare that submarine surveys were within the province of the aeronaut. Such, however, seems to be the case, since M. Durnof and his companion going up in a balloon, on the twenty-fifth of last August, at Cherbourg, and being at an altitude of five thousand feet, were amazed to see beneath them, with startling distinctness, every rock, fissure, and depression at the bottom of the sea. And yet the sea opposite Cape

Lévy, where the aerial voyagers obtained this bird's-eye-view, has an average depth of above two hundred feet. So limpid did the water appear that the under-currents were perceptible, whilst nothing would have been easier than to sketch or map the bottom of the sea.

A novel and perhaps a practically useful property of madder, hitherto only known as the active principle of a red dye, has been found out by M. de Rostaing. Meat covered with a layer of dry madder powder defies decomposition. It dries, however, slowly, wasting by desiccation so much that in the course of months it is reduced to less than half its weight. A more economical means of preserving meat is that employed at Buenos Ayres, whence beef, mutton, and even entire animals are constantly forwarded, in a state of perfect conservation, to Antwerp and Havre. The solution in which the meat is steeped contains borax and boric acid, saltpetre and a little salt, borax being the prime agent. The experiments of M. Dumas prove that borax destroys the soluble atmospheric leavens which would otherwise promote decay; and so far so good. But another *savant*, M. Peligot, who has dosed the plants in his garden with borax and killed them very promptly by so doing, suggests an ugly doubt as to the perfect wholesomeness of meat steeped in borax as an article of diet.

In spite of all the progress that has been made in electric science since first Volta put together his 'crown of cups,' a perfect galvanic battery is yet to seek. M. Onimus has done something towards this in availing himself of the virtues of the new, tough, and supple material which bears the name of parchment-paper. Every electrician knows that the great theoretical merits of Professor Daniell's 'constant' battery are counterbalanced by the trouble, care, and annoyance which it entails. All double liquid batteries have hitherto proved bulky, vexatious, and expensive; but M. Onimus simplifies matters by using parchment-paper instead of a porous cell, the copper spiral encircling the parchment, which is wrapped around the cylinder of zinc, and the pair of elements being simply plunged into a solution of sulphate of copper.

M. Leclanché, whose battery has for years past set in motion half the electric bells of Europe, has put what he considers the finishing touches to his well-known invention. He now, to compose his negative element, adds to his mixture of peroxide of manganese resin and hard gas-charcoal finely powdered, about four per cent. of the bisulphate of potassium, wedges the mass in a steel mould capable of enduring enormous pressure, and brings it first to a dull red-heat, and then under the action of the hydraulic press. We are assured that one cell of the improved Leclanché battery can heat a platinum wire to redness. A single element of Grove's or Bunsen's arrangement can do no more than this; and the result is the more creditable to the ingenious Frenchman that his is a 'constant' battery, excited by one fluid (the muriate of ammonia), and in which the consumption of zinc, always an important item, has been reduced to a minimum.

What we call vegetable isinglass, and the Chinese by the name of *thao*, and which has hitherto been derived from Eastern Asia, is now extracted from French sea-weed, and made useful in French

factories. It is in its crude state a yellowish gelatine, which the Industrial Society of Rouen has, after repeated experiments, succeeded in converting into what bids fair to be the best sizing for cotton cloths ever known. Macerated in water for twelve hours, boiled for fifteen minutes, strained, and stirred till it is cold, the *thao* gives a clear solution, which does not again become a jelly, and which can be laid cold upon any textile fabric, and left to dry. One invaluable property it has, since it defies, at common temperatures, damp and mildew; and is therefore already being applied to give lustre, not only to Rouen prints and Mulhouse muslins, but to the woollens of Puteaux and the silks of Lyons.

Ozone, the newest and the least stable of the gases, has recently been made to do good service in the sick-room. It makes short work with those miasmata and organic impurities of vitiated air which the Italians describe by the expressive name of malaria, and which every physician knows to be among the most baneful influences with which the convalescent patient, whose tenure of life is not yet quite assured, has to contend. A mixture should be made of permanganate of potash, peroxide of manganese, and oxalic acid, in equal parts, and two large spoonfuls with some water put into a plate and placed on the floor of the sick-chamber. Care should be taken, however, to remove steel fenders and fire-irons, and to cover up brass door-handles, since ozone will rust all metals meaner than gold and silver.

AUTUMN IN THE WOODS.

EVERY hollow fall of ferns,
Turning yellow in their turns;
Straggling brambles fierce and wild,
Yielding berries to the child;
Oak-buds tumbling from the tree,
Beech-nuts dropping silently,
Hosts of leaves come down to die,
Leaving openings to the sky;
Rhubells, foxgloves, gone to seed,
Everything to death decreed;
Nothing left of flowers or buds:
Such is Autumn in the woods.

And so 's there an Autumn known
To the heart. It feels alone,
Fearing its best days are past;
Sees the future overcast;
Fond acquaintance broken through,
Friends departed, friends untrue;
Human flowers cold and dead
Covered by a grassy bed;
Hopes, late blossoms putting out,
Withering soon, and flung about
By cruel winds; dread doubts and fears
Finding vent in sudden tears;
Yes, there is an Autumn known
To some hearts thus left, alone.

Yet, there's this thought after all—
Ferns may fade and leaves may fall,
Hearts may change or prove untrue,
All may look as these woods do—
Though sad Autumn here is given,
Spring-time awaits the just in heaven.

A. B.

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THE GREEN FLAG OF THE PROPHET.

SINCE the commencement of the war between Russia and Turkey, the world has several times been startled by the announcement that the 'Flag of the Prophet' was about to be unfurled in the streets of Stamboul. Such an event, if it should happen (which may heaven avert), would proclaim a crusade in which all true Mussulmans would be bound to take an active part, and to fight against Christianity in every part of the world. They may be in India, Arabia, Egypt, or wherever else their scattered race has found a home; the raising of the Green standard is a call which none may disobey without, as the Koran lays it down, sacrificing all his hopes of Paradise.

This fearful appeal to all the worst passions of the Eastern races hangs like a menace over the Mohammedan world; and if the word was once uttered and the dread flag unfurled, there is no telling to what sanguinary excesses it might lead an enthusiastic and half-savage people. It may be of interest to our readers if, under these circumstances, we endeavour to make them acquainted with the origin and history of a banner which has not seen the light of day since the Empress Catharine of Russia attempted to reinstate Christianity in the City of the Sultans, and which once unfurled, would set a whole world ablaze.

There have been many flags or signals used by various nations at different crises in their history to incite the peoples to battle on behalf of religions, dynasties, and ideas; but none has attained to the fearful notoriety which appertains to the terrible Flag of the Prophet, which is really a banner of blood, for it dispels the idea of mercy from the minds and hearts of its followers, and gives no quarter to man, woman, or child.

The Red Cross banner of the Christian Crusaders was an emblem of chivalry, mercy, gentleness, and love; but under its folds many a dark deed and many a shameless act were committed; and it was understood by the members of the Mohammedan faith to mean nothing less than the utter extermination of their race. This feeling, with its conse-

quent hatred of Christianity, shews itself even at this advanced period in the world's history, by the recent refusal of the Turkish government to allow its ambulance corps and hospitals to bear the red cross of the Geneva Convention (a sign which is entirely neutral, and is designed to protect its wearers while they are engaged on their errands of mercy to the sick and wounded of both sides), adopting instead thereof their own emblem of the crescent. Thus we see these rival emblems once more waving over the field of battle, though, happily, to mitigate rather than increase the horrors of war.

In France the 'oriflamme' or golden sun upon a field of crimson signified 'no quarter'; but this celebrated Flag of the Prophet means infinitely more than this. It is a summons to an anti-Christian crusade, a challenge of every believer in the Prophet to arms; a war-signal in fact, which, like the Fiery Cross of Scotland, would flash its dread command through the domain of Islam. In the interests of humanity, however, we may hope that the 'Commander of the Faithful' will never utter the dreadful word; for then indeed would the whole soul and strength of Christendom turn against the enemy of all civilised laws, human and divine.

The Prophet himself predicted that one day when his followers should number a hundred millions—which they do now, with twenty millions more added to it—his flag should fly against the advancing power of the northern races; and the Koran or Mohammedan Bible says that when its silken folds are flung forth 'the earth will shake, the mountains melt into dust, the seas blaze up in fire, and the children's hair grow white with anguish? This language is of course metaphorical; but it is easy to conceive, by the light of 'very recent history, that some such catastrophe might take place, as the displaying of this terrible symbol would raise a frenzy of fanaticism in the breasts of the Mohammedan race all over the globe.

The origin of the insignia is a curious one. Mohammed gazing out upon a vast prospect of

fields, said : 'Nature is green, and green shall be my emblem, for it is everlasting and universal.' In course of time, however, it lost that innocent significance; and amid his visions, the great dreamer saw the Green Flag floating as a sign that all true believers should take up their arms and march against the Infidel; in fact the green turban was the sacred head-dress of the pilgrim or perfected Islamite who had gone to Mecca; and hence the sanctity of this formidable standard.

When once unfurled, it summons all Islam by an adjuration from the Koran that the sword is the solitary emblem and instrument of faith, independence, and patriotism; that armies, not priests, make converts; and that sharpened steel is the 'true key to heaven or hell.' Upon that fearful ensign are inserted the words which are supposed to have been written at Mecca itself—namely, 'All who draw it [the sword] will be rewarded with temporal advantages; every drop shed of their blood, every peril and hardship endured by them, will be registered on high as more meritorious than either fasting or praying. If they fall in battle, their sins will be at once blotted out, and they will be transported to Paradise, there to revel in eternal pleasures in the arms of black-eyed houris. But for the first heaven are reserved those of the Faithful who die within sight of the Green Flag of the Prophet.' Then follow the terrible and all-significant words, the fearful war-cry against God and man: 'Then may no man give or expect mercy!'

This is the outburst of barbarism with which the world is threatened in this year of grace 1877; and the reader cannot do otherwise than mark the cunning nature of the portentous words inscribed on the Prophet's banner. What would not most men do, civilised or savage, for 'temporal advantages?' While to the Eastern peoples fasting and praying are looked upon as of so meritorious a nature, that to find something else which, in the eyes of Allah, would be deemed of greater value still, would be a desideratum which none would fail to grasp, by any means whatever, if it came within their reach. But Mohammed's wonderful knowledge of human nature, and more especially of Eastern human nature, is shewn in his picture of Paradise as prepared for the Faithful who fall in battle; while his declaration that the highest heaven in this so-called Paradise will be reserved for those who die within sight of the Green Flag, is a masterpiece of devilish policy unequalled in the annals of mankind.

It scarcely needed the fearful words which follow to add emphasis to this dreadful appeal to the passions of a semi-barbarous race. Another motto on this sacred flag is not without significance at the present time: 'The gates of Paradise are under the shade of swords; and this alone would, if the flag were unfurled in the holy mosque of Constantinople, give to the Turk a moral power over his subordinates the effect of which it would be vain to calculate. Civilised though he partially is, he still firmly believes in the old doctrine of

ismet or fatality, and in angels fighting on his behalf; not less implicitly than did his ancestors at the battle of Beder, where this formidable green standard was first unfurled. 'There,' says the historian, 'they elevated the standard, which Mohammed from his height in heaven blessed.'

Thus arose the great tradition of this sacred war-emblem, which it is a Turkish boast was never yet captured in battle, though it was once in extreme peril in a fight between hill and plain; when Mohammed himself had it snatched out of his hands. Ali, his kinsman, however, thrust himself in front of a hundred spears, and won the victory with the immaculate flag flying over his head.

It is scarcely to be wondered at that a race so superstitious as the Turks should attach an almost miraculous value to such a symbol of their past history and their present power. It is a spell wherever their race or religion flourishes, and its invocation in the serious form now menaced cannot be regarded without anxiety. The day of the military apostles of Mohammed may be past, it is true; but the tradition survives; and the unfurling of this flag might be the spark which would set fire to the latent enthusiasm of the Mohammedan race and involve the world in a religious war.

We have referred to the great French banner, the oriflamme; and it was that which led the French Crusaders through the Holy Land and headed the royal armies of France in their campaigns of the sixteenth century, while it also divided the Blue from the White in the Burgundian civil wars; but this Flag of the Prophet to-day exercises a magical influence over one hundred and twenty millions of the human race, scattered about in Arabia, Syria, Asia Minor, Persia, and Egypt, over the Nile and the Ganges, and from Jerusalem to the Red Sea.

The desire of Mohammed, however, was, that while all pilgrims whose task had been duly fulfilled should wear the green turban, no sovereign in his succession should unfurl the Green Flag of the Faith unless Islam were in imminent peril. The unfurling of the banner would be performed with great religious ceremony, and in the presence of the Commander of the Faithful, who is himself supposed to carry it at the head of his army; while a fearful curse would be called down upon the head of every Mohammedan who, capable of bearing arms, failed to rally round it.

The standard itself is not a very handsome one, and is surpassed both in value and appearance by many of the banners which belong to the various benefit societies and other mutual associations of men in this country. It is of green silk, with a large crescent on the top of the staff, from which is suspended a long plume of horse-hair (said to have been the tail of the Prophet's favourite Arab steed), while the broad folds of the flag exhibit the crescent and the quotations from the Koran already mentioned.

The state colour of one of our regiments of the Guards is a much prettier and more expensive standard than the great banner of Islam; but (to such small things is man's enthusiasm attached) if the latter was the veriest 'rag' in existence, nothing could mar the beauty which the prestige of more than a thousand years has given to it in the eyes of a Mussulman.

The Flag of the Prophet is kept in the mosque

of St Sophia at Constantinople, and is in the custody of the Sheikh-ul-Islam, or Mohammedan chief-priest, where all well-wishers of humanity may sincerely trust it will ever remain.

FROM DAWN TO SUNSET.

PART II.

CHAPTER THE SEVENTH.

DEBORAH and Mistress Dinnage were walking in the old garden, in the moonlight, on the mossed green walk along which they had played hound and hare in "madder merrier days." They walked slowly, arm in arm, talking plentifully and earnestly, and still the old difference shewed between them. Deborah, so cold with most of her own sex, and so wont to accept passively their enthusiastic tokens of affection and admiration, dealt only the most caressing tenderness to Margaret Dinnage; which Mistress Dinnage, on her part, returned with brusqueness and no outward show of affection whatever.

"I made him take it," said Deborah. "I know not what sore trouble had got hold of him. I think it was worse than need of money, or a greater debt than he has ever had before."

"And he has gone to Master Sinclair?" O Lady Deb, you should have made him see Sir Vincent first; though, good sooth, it is easier to preach than to practise, and it is no light task for ye to lead Master Fleming. But I, like you, abominate that old man. Whenever he rides up the chase, I say to father: "Father, the old fox comes! He wishes no good to Enderby."

"I know it well; more strongly my heart tells me so each time. He comes for poor Deb Fleming; but time and coldness will soon unearth his cunning, and turn his hateful love to cruel hate."

"Ay, and he will urge your brother on to ruin, in hopes of winning you."

"O Mistress Dinnage, good Mistress Dinnage, say not so, so coldly! Sweet heart, how could this thing be? Marry the man who compassed my brother's ruin? You speak wisely!"

"Ah," said Mistress Dinnage scornfully, "you are blind; but I, shut out from all great folk's doings, can see and know them well. I can see how Master Sinclair, that old fox, would bring you and yours to *beggary*—ay, to shame—that he may say to ye: "Wed me; I will save your father and brother." He knows your love for them. He knows o' what stuff you're made. And indeed you'd be sore pressed between your love for them and your hate for Master Sinclair."

"O Meg, say no more. You wrong me. I had rather see them *dead*. But what can I do? The swiftest horse would not catch Charlie now. O Mistress Dinnage, you have scared me, and I am not wont to be scared. What if Adam Sinclair drives him mad? gives him some great sum, and then has him up to pay it! No; stay! Charlie is not of age. But worse, if he refuses aid, and my poor boy flies the country. O merciful heaven! Deborah stood with her hands clasped upon her head, and her eyes regarding Mistress Dinnage wildly.

"No," said Mistress Dinnage thoughtfully; "this will not be. If Master Fleming is in debt, old Adam Sinclair will give him the money needful, and draw him on and on; for the time's not come

yet. Lady Deb, you must talk to him—to Master Fleming. You alone can save him, an' it's a down road he's goin'. If father hadn't spared the rod so oft, an' we hadn't screened him so oft from blame, this thing might not be. But that is past. If ye will save Master Fleming from utter ruin, *now* is the time."

"Ay, you talk," said Deborah scornfully; "you had better turn a wild Arab horse afield, and bid me catch him. Don't I pray? Don't I plead to him—ay, till my very soul dissolves in words, to keep him at home from mad companions? What can I do? A sister cannot tether him. Love alone would save him."

"Love? Ah, you speak to me o' what I know nothing; my heart, you know, is"—

"True as steel."

"Ay, but as cold. But if a maiden's love indeed would save him, ask some one whom Master Fleming could love; ask Mistress Warriston; and he may come to love her."

"Well; indeed he might. And May is an heiress too, and lovely. When Charlie cared not for her, he was a boy; and now he is grown a man, older than his years. Do you truly advise me to ask May here, who had indeed, we both thought long ago, some secret liking for my poor Charlie?"

"I don't advise," quoth Mistress Dinnage. "But, ask her." Then again: "Well, do as it pleases you. I won't advise. I know not if it would be for good or ill."

"How could it be for ill?"

"It might break Mistress Warriston's heart, which is so tender!"

"How know you it is so tender?"

"Because it is worn upon her sleeve, and ever melts in tears."

"I love her for that womanliness."

The proud lip of Mistress Dinnage curled. "Yes, it is well. Tears ease the heart, and ladies have time to weep."

"You would never weep, whatever ailed ye. Oh, thou'rt a proud incomprehensible little maid. I would like to see thee well in love."

"That ye never will!"

"Never boast. It is a sign of weakness, Mistress mine. But is there a doubt that Charlie Fleming would *not* love one so charming as May? Were I a man, I would worship her; and it is such bold spirits as his that love the soft and tender. Charlie *will not* woo; he looks askance to be wooed, and would love the maiden wooer! I know Charlie Fleming."

"Then if he loves to be wooed," said Mistress Dinnage, with a fierce scorn, "let him seek it in the streets of Granta; fair enough women there, and ready too. I thought not that Master Fleming would love such kind!"

Deborah withdrew her arm from her companion's, and answered coldly: "You offend me. You wilfully misunderstand me. But how can I look to be understood by one who knows no softness, no weakness of her sex! You have a hard, hard heart, Mistress Dinnage, if it be a noble one. The good you do is never done for love."

"True enow, good sooth. But such poor love as we describe, defend me from! It is water and milk at best. If God made me love, my love would lie so deep that the man who would win it must dig and dig to find it. Ay, hard!"

'Proud Mistress mine, do you value yourself thus highly?'

'Ay, I am a poor girl; but I have an honest heart, Mistress Fleming, and value it as highly as any lady in the land. He who loves, but thinks it not worth the winning, let him go; he who sets not such store by my love, let him go; and if the right man never comes, let the others go! If Margaret Dinnage could have loved, it would have been thus with her; and the hidden unvalued love would live and die within one heart.'

'I know it, I know it!' cried Deborah impulsively. 'O noble heart! *this* is the kind of love I can feel for, for I have it beating here;' and Deborah laid her hand upon her own breast. 'One thing you lack, Meg—that would make you perfect. *Love!*' Pleading, earnest, sweet, significant, tender, emphatic, was the utterance of the last imperative word, and Deborah's arms were round her friend, and her upturned face upon Margaret's breast. So in the moonlight the girls stood: a fair picture, for the head of Mistress Dinnage was turned aside, and her grave dark eyes averted; and in that moment each proud heart was revealed to each. '*Let thyself love,*' continued Deborah, in her sweetest softest tones. 'Ye can be too proud, Mistress Dinnage. The day will come when ye will rue it bitterly. I would not urge ye, if I divined not the secret of another heart. Are you so blind that ye cannot see it too? The restlessness when you're not by; the wistful eye—that I dare not answer! O Mistress Dinnage, if Kingston Fleming had had one such look for me, in those old days, child as I was, I would have loved him before all the world, truly and unchangeably. Know ye not that I speak the truth? Would I urge ye to your ruin? When once a Fleming loves, he never loves but honourably. Then, his fate is not in *my* hands—but in *thine*.' There was silence. The last three words, though whispered, rang again and again in the listener's ears like music. What Mistress Dinnage thought then, was not told, but Deborah felt the wild heaving of her breast.

So a few moments passed, and Margaret put Deborah from her with firm but gentle hands. 'Talk no more of this,' she said, while they walked on. 'I will not be so stubborn as to seem ignorant of your meaning. But I do not think with you. No; do not speak, my sweet Mistress Deborah; no words will make us think alike. What! was it not so in the old days, that your heart would ever outrun your head, and ye *would* believe what ye longed for? Noble it is of ye to long for this; but Deborah Fleming, ye are like no other woman living, rich or poor. Ye are *yourself*; and I know you to be above all the littlenesses of woman-kind.'

Deborah blushed with pleasure. 'Hush, hush!' she said. 'This from you is too high praise; and dangerous, because you mean it all, and no flattery. But if it is noble to plead for one's dearest wish, and to choose above all rank and riches one's best and dearest friend, then I must be a very noble maid! But it seems to me simple nature, and no nobility. God has given me no ambition for great things; on the other hand, He has given me the power of loving faithfully; so that through all, with all her faults, never think but that Deborah Fleming will be true to her nature—true to those dearer than her own life!'

And then, Mistress Dinnage beginning, they talked of Kingston Fleming. A very frequent subject of conversation was he. It would not be fair to write all the nonsense that maidens will talk, even a Mistress Fleming and a Mistress Dinnage, for diamonds are found in dust. And they talked with great earnestness and gravity of the lace cap and discussed every minute point of dress; and what should be done if King Fleming came, and there was no host to receive him. Would he stay? Would it be seemly? Surely with Dame Marjory—and much laughter even; for laughter and tears are near akin; and in April, sun follows showers.

CHAPTER THE EIGHTH.

The next morning, Deborah, in her great saloon, was tending her flowers and thinking of Charlie, when she heard her father's step. With a rush she was out, and the sun streamed out with her through the open door.

'My Rose of Enderby, art smartening up! The lad Kingston will be here to-morrow.'

Deborah's treacherous heart gave a great leap. 'Who told you so?' she asked calmly.

'This scraw! Why, Deb, ye must look gladder than that; he is your cousin, ye know: or have ye forgot him?'

Deborah read the note in silence, and then her busy bewildered thoughts flew off. Oh, she must be calm; this would never do; she must be 'Mistress Deborah Fleming,' receiving in all cousinly courtesy the affianced lover of Mistress Beatrix Blanchellower, her rival beauty in a rival county.

'Father,' said Deborah, with sudden laughing joy, 'I must have some guests to meet him. Why, I have seldom had a party here; a very little money will go a long long way to make this bright and gay, and you have a store of good old wine still left. Wine, and flowers and *momen*, father! What more do mortals want? And it will be returning Master Sinclair's generosity, which necessity weighs heavily on us, till it be paid. Oh, leave it to me, father, and you will think me a rare Mistress of Enderby!'

Sir Vincent looked round somewhat ruefully. 'Must it be, sweet heart, and even to-morrow? It cannot be.'

'It can. Trust in me. Why, father, you will be the gayest of the gay, as ye always are at such times. Dost give consent?'

'Why yes, tyrant. But ask Adam Sinclair.'

'Trust me' And Deborah was out and away to Dame Marjory and Mistress Dinnage. The lord of Lincoln for once would be welcomed!

It pleased Deborah to have a banquet in the hall and music in the saloon. Why, she had twenty pounds a year; and good luck! one could not *always* contemplate ruin. A Fleming was coming home; they would 'kill the fatted calf.' Such pleasures were far between.

It was short notice, but willing messengers were soon afoot, and Granta was laid under requisition for guests. Deborah, happy and proud, sent the word to all invited guests that short notice was involuntary on her part; her cousin Kingston Fleming was coming home suddenly, and who could, must come and dance at Enderby. So what with Granta men and young belles of

Deborah's age, and a few old dowagers and a few Adam Sinclairs, the party was made up. Deborah was lucky. She, in her sheeny lovely dress, was well-nigh worshipped by the men, she looked so full of life, so brilliant. But no Charlie! That was the one drawback; nor did Adam Sinclair know where he was, save that he had left Lincoln the day before in good spirits. Deborah knew in her heart what that meant. As she conversed, she looked full at Adam Sinclair, and felt to love all man and woman kind. The aged wooer trembled before the gracious girl; time only heightened his passion and hardened his determination to win Deborah Fleming at all hazards. The county had already begun to whisper about his infatuation and her coldness.

Eyes enough were upon them though, and the dowagers decided that so far from being 'cold,' Deborah Fleming encouraged him by every means in her power.

'Missess Fleming,' he whispered ardently, 'give me some token to-night—some slight token of favour. Your eyes look kind to-night. Give me that rose.'

Deborah glanced at the red rose in her breast. 'This rose, Master Sinclair? Nay; not this: there are a thousand others in the garden. Marjory shall bring ye one.'

'I covet this one, Missess Fleming, warm from your heart. What is it to you? And I would give a hundred crowns to possess it.'

'It would seem perchance a love-token, and those I never give.'

'Ye are obdurate.'

Deborah turned away from those gleaming eyes. 'I am honest,' she said.

'Missess Leyton,' said Adam Sinclair, turning with a courtly smile to an old dame who was sitting near, drinking elder-berry wine and listening open-eared, 'will ye not plead my cause? Here is Missess Fleming will give me nought. And what do I ask? Nothing, but that red rose from her gown.'

'What would you do in my place, Missess Leyton?' asked Deborah.

'Why, if I favoured Master Sinclair, I would give him the rose.'

'You put it very strongly,' laughed Deborah. 'But you have released me from my strait, for I could neither be so bold as to favour Master Sinclair nor so rude as to shew him none; so I give my rose to you.'

'Keep it, child; it looks so lovely. It suits too thy name—Rose of Enderby.'

'Missess Leyton, you must bring this Rose to Lincoln one day,' said Adam Sinclair. 'Now do this much for me, for old acquaintance' sake!'

'But will Missess Deborah come?'

'I know not,' answered Deborah, smiling. 'What I would like now, I may not like to-morrow.'

'Thou art a spoiled child and a wilful one.'

'Yes; I fear me it is so. But Master Sinclair, I am not ungracious.'

'I think ye are. Come one moment to this window.' He led Deborah into the recess, and asked her to gather him a rose, a red rose. The brilliant lights flashed athwart them; near by stood a bevy of young and scowling men; the roses were laughing and fluttering about the casement. The tall old figure was bending down, and Deborah, gay yet reluctant, and looking gloriously

beautiful, raised her eyes to present the gift, when Kingston Fleming entered.

He had heard enough on the way about 'Missess Deborah Fleming' and 'Master Sinclair'; all rumours united their names, till he knew not what to believe, but laughed and wondered. So, with his old indolent curiosity, he looked up at Enderby, and saw lights gleam through the great windows, heard music, and saw dancing forms flit by. He raised his glass, and laughed. 'Why, Deb is queening it right royally! I imagine Master Sinclair is among the guests.' And wondering at it all, and greatly edified, Master Kingston Fleming, having first put his travelling-dress in some slight order, was conducted by Dame Marjory along the gallery. 'Are they often so gay, Marjory?' he asked, laughing at her grim but important countenance.

'Never, never, Master King! Bless thee, no. There are lonesome hours enow at Enderby, an' Master Charlie never here. This is a whim of the young missess to welcome thee, Master King;' and her features relaxed into a grim smile. 'She has such a whim now and again.'

So Kingston Fleming entered, and saw the picture we have drawn. From that moment the mad young hoyden faded for ever from Kingston's mind, into the stately beauty who stood there. She turned, the colour flushed to her cheeks and light sprang to her eyes. 'Kingston!'

'Why, Deb! But "little Deb" no longer. How changed! I scarce know you.'

Then Sir Vincent came forward, and they were parted, for Missess Fleming had duties to fulfil. But ever Kingston's eyes followed her, though she had no eyes for him. Then there was the dancing, and all were seeking Deborah; she was surrounded; and often she saw herself in the tall old mirrors, and her beauty flashed on her like a surprise. Deborah Fleming carried all before her that night; she sang—that was her one perfect gift; she had a splendid voice, and sang with power and sweetness, and some deep emotion threw passion into her song that night. Then there was the supper, when Adam Sinclair sat on Deborah's right hand. Then another measure. But Kingston would not dance, though he loved it with enthusiasm. Then there was the hour of two tolled out from the chimes of Enderby, and the last carriage rolled away.

'Come down and smoke a pipe, boy,' said Sir Vincent; and Kingston said he would follow.

Deborah, tired, but strangely happy, had thrown herself on a sofa. 'Not yet, King,' said she. 'You have been away for two long years; you have much to tell me, sure. You have seen May Warriston?'

'Ay; in a picture-gallery at Florence.'

'Was she changed?'

'She was prettier and graver. I even thought little May somewhat staid and prim; but then old Guardy was at her elbow.'

'Did she speak of me—of us?'

'Of you, a hundred times.'

'Sweet May! And you, Kingston'—Deborah blushed and hesitated—'you have come from Rimbolton?'

'Yes.'

(Why would he not speak, and aid her?) Deborah continued shyly: 'And is—Missess Blancheflower well?'

'I thank ye, very well.'

Deborah could say no more aenit that. 'Are you changed, King, in looks? Let me see.' She bent forward, and laid one hand upon his. 'Nay; the old comie King, with whom I oftentimes quarrelled sore; only browner, thinner, graver too, as I see thee now.'

'Cares of the world, Deb. Where is boy Charlie?'

'Nay; I know not.' What a sudden paleness and abstraction overspread the sweet face! 'Charlie is much away, Kingston. I hope you will see him and talk to my dear boy like a good kinsman. Charlie needs a sterling friend.'

Kingston looked grave, thinking perhaps how far he himself had led Charlie from the straight and narrow track. He answered gaily, however: 'Oh, he is young yet. Charlie promised to be a fine fellow in the end; and with his talents, we must make something of him. Don't despair, Deb.'

'Nay; I never despair.'

'I hear that he is a friend of Master Adam Sinclair's.'

'Yes. Didst hear that at Rimbolton?'

'Yes; and elsewhere too.'

'Then ye have doubtless heard most tidings?'

'Yes, Deb. Tidings spread like wild-fire on a country-side; but I don't credit all I hear, or I should believe ye to be betrothed to Adam Sinclair.'

'When I tell you, you may believe that, not till then,' answered the maiden.

Then followed a long silence, and Kingston looked on vacancy through the fading rose on Deborah's breast. O irrevocable past! O vague dark future! 'You used to hate me, Deb,' said he suddenly, at last.

'Ay? Did I? Well, perhaps I hate you now.'

'Perhaps you are grown a little hypocrite, as you give me kind smiles in place of former frowns.' 'That is a necessary duty. I smile at Master Sinclair.'

'There is no disguise there. It springs from the heart, Deb.'

'You can read my heart then? No; I do not hate you, Kingston; I love you as my kinsman and my brother's truest friend.'

'Not always his true friend, Deb,' said Kingston quickly. 'Don't give me more than my due.'

'Well, I don't hate you for your candour, but rather love you, King.'

'Dost love me, Deb?' Kingston Fleming looked up strangely and suddenly from under his long love-lock with his old arch smile, but there was a wistful sadness in it too.

Deborah blushed scarlet at the sudden question. 'Love ye?' she begged curly, to hide her confusion. 'Ay, well enough. We shall be friends, I know. We will quarrel no more, King; we two must be friends.'

'Friends, sweet heart—friends?' What ailed him as he murmured these words? He seemed like one distraught. Springing up, he paced to and fro the long length of the saloon, then stopped before the maiden.

'Well, good-bye, Deb. I am tongue-tied in thy presence. I had better go. Kiss me!'

Deborah blushed. 'Nay; I never did that.'

'Is that a reason ye never should?' And Kingston stooped and kissed her.

He was gone. Was it pleasure or pain that caused Deborah's heart to beat so wildly?

'Oh, this must not be,' she exclaimed passionately. 'This shall not be. I love him madly. And he? Oh, shame on me, to let him do this thing, and trifle with me thus! He, affianced meantime to Mistress Blancheflower; and thinks the while to play with Deborah Fleming's heart!' The girl started up, and paced where Kingston had paced before her. 'Two can play at this,' she said. 'Ah, Master King Fleming, if ye think to lower a Fleming's pride, it shall go hardly with ye! But if ye mean well, I will bless thy future, and still love thee—as neither friend nor foe.' Deborah's voice sank to a whisper of unutterable tenderness. 'Friends, sweet heart—friends?' What meant he by that, but to put vain and wicked love-thoughts in my head? Can I believe thee so dishonoured, Kingston? Thou, whom I thought the soul of honour! It cannot be. But I will watch thee well. Love thee as a friend, forsooth! It is Deborah Fleming's curse to have a heart true to one life-long love, one long unmadly love—because unsought, unearned for. Ah me! I fear myself. I dare not think on Mistress Blancheflower, lest I seek to do her some grievous harm. I dare not think on that marriage-day. O Beatrix Blancheflower, do ye love him well? So well, that ye are worthy of my sacrifice! Ah! why did King Fleming come here! For the love of honour and of good faith to Mistress Blancheflower, I will estrange him from me.'

ITALIAN VAGRANT CHILDREN.

LITTLE Giovanni Alessandro Bosco, the bright-eyed Italian boy who has a couple of white mice to attract the attention of passers-by, or believes that kind folks will perchance give a copper for hearing a tune played on a small barrel-organ, is not perhaps aware that he has risen to the dignity of being officially noticed. In other words, Italian organ-boys, image-boys, street exhibitors, and appellants to a compassionate public, have been the subject of correspondence between the diplomatists of Italy and those of England. The despatches or communications have lately been published in a blue-book or parliamentary paper; shewing that European governments are now alive to sympathies which would have had but little chance of manifesting their presence in an earlier and ruder state of society.

About three years and a half ago, we gave an account of what had come under our knowledge in Italy concerning the deportation of Italian boys as beggars or exhibitors. We stated that 'Much to its credit, the parliament of Italy have before them a bill to abolish the system of apprenticing children of less than eighteen years of age to strolling trades or professions, such as mountebanks, jugglers, charlatans, rope-dancers, fortune-tellers, expounders of dreams, itinerant musicians, vocalists or instrumentalists, exhibitors of animals, and mendicants of every description, at home or abroad, under a penalty of two pounds to ten pounds for each offence, and from one to three months' imprisonment. It is to be trusted that this will shortly become law, and so put an

end to one of the most crying evils of our time.' Subsequent facts show that, although this law has passed in Italy, and may in that country be producing some good results, it has not in any way lessened the number of vagrant Italian children seen in the streets of London and other English towns. How it happens that the remedial measure has not relieved our shores from this incubus, we will explain presently; but it may be well first to summarise a few of the statements in the former article, sufficient to shew the mode in which this cruel traffic is carried on.

In years gone by, when Italy was split up into a number of kingdoms, dukedoms, and petty states, very little attention was paid to the general welfare of the people; the peasants and small cultivators were often so hardly driven that the support of a family became a serious responsibility; and a people, naturally kind rather than the reverse, were tempted to the adoption of a course from which their better feeling would have revolted. They did not actually *sell* their children, but they apprenticed them off for a time, on the receipt of a sum of money. The *padroni* or masters, to whom the children were apprenticed, were men whose only sympathy was for themselves and their own pockets; they made specious promises, and got the poor young creatures, eight years old or so, into their hands. Too often, the parents never saw the children again, and remained quite ignorant of their fate. It was not in Italy that the secondhands kept their victims; they mostly crossed the Alps into France, whence many of them found their way to England. Or else they were shipped at Genoa, and conveyed at cheap rates to such shores as seemed likely to be most profitable to the *padroni*. As these men acquire an accurate knowledge of the extent to which sheer open beggary is illegal in this or that country, they adopt a blind, by turning the poor children into exhibitors of white mice, marmots, or monkeys. Advanced a little in age and experience, the boys are intrusted with small organs, and perhaps later with organs of larger size. Those whose strength of constitution enables them to bear a life of hardship during the so-called apprenticeship can sometimes obtain an organ on hire from one of the makers of those instruments, and become itinerant organ-grinders on their own account. But there is reason to fear that the poor boys too often succumb to the treatment they receive, and die at an early age. As to what befalls the girls thus expatriated, another sad picture would have to be drawn.

No resident in London, no visitor to London, need be told of the organ nuisance. Some of the organs, it is true, are really of excellent tone, and play good music; but they become a pest in this way—that the men, taking note of the houses whence they have obtained money, stop in front of those houses more and more frequently, in the hope of being paid, if not for playing, at least for going away. Some of these organ-men have been organ-boys who came over with *padroni*.

And now for the diplomatic correspondence relating to this subject.

In 1874 the Chevalier Cadorna, Italian Minister at the Court of St James's, addressed a communication to the Earl of Derby relating to these wretched and ill-used children. He stated that a law had been passed in Italy, the success of which would depend largely on the co-operation of other governments. It had been ascertained that in many provinces of that country parents lease or lend their children for money; boys and girls under eight years of age, who are taken by vile speculators to foreign lands, there to be employed as musicians, tumblers, dancers, exhibitors of white mice, beggars, &c. It is a white slave-trade, in which the unfeeling parents participate. London is especially noted for the presence of these unfortunates; the *padroni* or masters find that a good harvest may be made out of the injudicious because indiscriminate charity of the metropolis. 'Miserable it is for the children,' says M. Cadorna, 'if they fail any day to obtain the sum which their tyrants require from them! This is the reason why we often see them wandering about till late at night, exhausted by fatigue and hunger, rather than return to the lodgings where they dread ill-treatment of various kinds from their pitiless masters.' The police magistrates of London are frequently occupied in listening to the complaints of these poor creatures. But no: this is hardly the case; for the victims are generally afraid to make their sorrows known, lest they should suffer still worse from the vengeance of their taskmasters; sometimes, however, they are too ill from bad treatment to conceal their misery; while at other times they are taken up for begging. Who knows? perhaps the poor things receive better food and lodging during a few days' imprisonment—certainly better in a reformatory or a workhouse—than in the squalid rooms which their tyrants provide for them.

The Italian government are endeavouring to check the evil at its source or fountain-head; making the leasing of children by their parents illegal. If this does not produce a cure, then they are endeavouring to watch the slave-traders (as we may truly call them), and forbid them to carry their victims across the frontier or out to sea. When the Chevalier Cadorna made his communication to the Earl of Derby, the new law had been too recently passed to supply evidence of its practical effect; but he pointed to the fact that the law could not meet with full success unless foreign governments would render aid, by making this kind of Italian slavery unlawful in the countries to which the *padroni* bring their little victims. A suggestion was made that the Extradition convention, signed between England and Italy, might possibly be made to take cognizance of this state of things. Not so, it appears. The Home Secretary, when appealed to, stated that traffic in children is not within any of the crimes named in the English Extradition Acts. 'It appears to Mr Cross

the source of the evil arises in Italy, and that measures might be there adopted for preventing the egress from that country of such children as are described in the letter of the Italian Minister. He supposes that it would be competent to the Italian government to decline to grant passports for such children, and thus prevent their crossing the Italian frontier. There is no power to prevent such children from landing in this country. All that can be done is to protect them from any cruelty or ill-treatment on the part of *padroni*; and Mr Cross is assured that the metropolitan magistrates are most anxious to carry out that object, and that they are very desirous to abate the evils as far as our laws empower them to do so.

So the matter rested for a time. Three years later, in May of the present year, the subject was mentioned in the House of Commons; and the Italian Minister, General Menabrea (successor to the Chevalier Cadorna), informed the Earl of Derby that the Italian government cannot effect all they wish in preventing the exodus of the *padroni* and their victims. 'It is easy for them to elude the vigilance of the authorities; for passports being now practically abolished from Italy to France, and thence to England, the traffickers in children can, by expatriating themselves, relieve themselves from the punishments they have incurred.'

Thus the inquiry ended nearly as it began, so far as definite conclusions are concerned. England is very chary of making restrictions on the freedom of entry of foreigners on our shores. Deposed emperors and kings, princes in trouble, defeated presidents and past presidents, persecuted ecclesiastics, patriots out of work—all find an asylum in little England; and many things would have to be taken into account before our government could legally forbid the Italian children and their *padroni* from setting foot on English ground.

No one can glance habitually through the daily newspapers without meeting with cases illustrating the condition of the poor Italian children. Some months back the magistrates of North Shields had a boy and a girl brought before them charged with begging. The fact came out in evidence that their *padroni* had bought or farmed them of their parents, and brought them to England. Marianna Frametta was fourteen years of age, Marcolatto Crola eleven. He had bought or rather leased them for twelve months, at ten pounds each: his calculation being that this sum, four shillings a week, would be amply covered, and much more, after providing them with board and lodging by their earnings. They usually, it appears, got from nine to fifteen shillings a day by begging, possibly with the addition of some small pretence to an exhibition of white mice. If they brought home less than ten shillings each, they were beaten instead of fed at night. These sums appear strangely large; but so stands the record. It is satisfactory to know that the fellow was punished with imprisonment and hard labour for his cruelty. But what would eventually be the life of the children themselves? They were sent to the workhouse for temporary shelter, food, and medical treatment; these could only last for a time; and

the youngsters would still be aliens, without definite occupation or means of livelihood.

There can be no doubt that the English habit of giving small sums of money to people in the streets and at the street doors has something to do with this matter. It may be due to a kind motive, but it unquestionably increases the number of applicants, and opposes a bar to the endeavours of governments and legislatures to bring about an improvement. Nevertheless it is quite right that all should be done that can be done to prevent ruthless speculators from bringing over poor Italian children to our shores, and then treating them like veritable slaves. This should all the more sedulously be attended to, because the *padroni* (so far as concerns the metropolis) live almost exclusively in one district, around Hatton Garden and Leather Lane. The narrow streets, courts, and alleys in that vicinity are crowded with them; every room in some of the houses being occupied by a distinct Italian batch, crowded together like pigs in a sty, and forming hotbeds of disease. When the 'Health Act' and the 'Lodging-Houses Act' gave the police power to enter such wretched apologies for dwellings, fearful scenes of this kind were brought to light. Matters are gradually being improved, but only by dint of constant vigilance.

Evidently there is an anxiety on the part of the Home Secretary to do all in his power to suppress the scandal, as is evidenced by the following circular, addressed to the police authorities of the metropolis: 'The attention of the Secretary of State has been called to the practice under which children bought or stolen from parents in Italy or elsewhere are imported into this country by persons known by the name of *padroni*, who send them into the streets to earn money by playing musical instruments, selling images, begging, or otherwise. It is most important to suppress this traffic by every available means, and Mr Cross relies on the vigilant co-operation of the police for this purpose. In many cases the employer will be found to have committed an offence against the Vagrant Act, 5 George IV. cap. 88, by procuring the child to beg. If so, he should be forthwith prosecuted, and the result of such prosecution should be made the subject of a special report to the Secretary of State. The child will probably come within the provisions of the 14th section of the Industrial Schools Act, 1866 (29 and 30 Vic. cap. 118), either under the first clause (as a child begging alms), or under the second clause (as a child wandering and without proper guardianship). An application should therefore be made to the justices for the child to be sent to a certified industrial school. Further application should be made, under section 19, for the temporary detention of the child in the workhouse until the industrial school has been selected, information being at once communicated to the Secretary of State, in order that, if requisite, he may render assistance in making the necessary arrangements. The final result of each case should also be reported to the Home Secretary.'

In conclusion, we are glad to see from the newspapers that the Brighton School Board, by enforcing the provisions of the Elementary Education Act, have been successful in terrifying the *padroni* who bring Italian vagrant children to the town, and thereby have banished them with their unhappy victims. The circumstance offers

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'WHAT'S this?' cried Miss Hammond, breaking open a letter just handed to her by a servant. 'You read it, Maggie; your eyes are better than mine.'

Small wonder at that indeed, seeing that Maggie is aged about eighteen, and the other sixty-five at the very least, a pleasant-looking, well-preserved spinster, with a brown resolute face and sausage curls over the forehead. Maggie, a handsome modern girl, sits down and reads:

MADAM—The parishioners of St Crispin, Gigglesham, in vestry assembled, have determined to rebuild their parish church, pronounced unsafe by the surveyors. Contributions are earnestly requested. The alterations will necessitate the removal of many vaults and graves; among others, that of the Hammond family. It is the wish of the churchwardens to respect the wishes of survivors and others in the disposal of the remains. Any directions you may have to give, you will be good enough to communicate to the undersigned.—Your most humble obedient servants,

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WILLIAM BONNER,
Churchwardens.

The two Misses Hammond (Margaret and Ellen) are joint proprietors of the comfortable estate of Westbury, near Gigglesham, and of the handsome mansion thereto belonging. Maggie, the young girl, is a distant cousin—although she calls them 'aunt'—and lives with them. There is also a young man, Ralph Grant, somewhere about the place, of whom more anon.

Old Tom Hammond, the father of the two maiden sisters, was born in the year 1740, and might have seen the heads over Temple Bar after the rising of 1745. He lived till 1830. He had married late in life, and left only these two daughters. Thus two generations bridged over a space of time generally occupied by many successive lives; as in the case of another branch of the family, the founder of which, Major Richard Hammond (the uncle of the two old ladies), who had been at the capture of Quebec when General Wolfe was killed, being the great-grandfather of Maggie Landerdale and Ralph Grant. Major Hammond was the elder of the two brothers, and should have inherited the Westbury estate; but he offended his father, General John Hammond, by what was called a low marriage, and was disinherited in consequence.

Tom Hammond had done his best to remedy his father's injustice, as far as he could without injuring himself and his own, by making a settlement of the estate, in failure of his own issue, upon the lawful descendants of Major Hammond, his brother; providing that if the issue of his elder brother should fail, the estate should go to the issue of a younger brother Henry, who, by the way, had been well provided for by the small estate of Eastbury. This brother Henry was now represented through the female line by a Mr Boodles of Boodle Court, who now also held the Eastbury estate.

The descendants of Major Hammond are now confined to these two young people, Maggie and Ralph. They are both orphans and without means, their forebears having been mostly in the soldiering and official lines. Ralph is a lieutenant in the artillery, and his battery is now in India; but he is at home on sick-leave; and he has taken advantage of his furlough to win the affections of his fair cousin. As the Westbury estate would come to be eventually divided between them, it was considered a most fortunate thing that the young people had come to an understanding. Ralph was to leave the service when he married, and take the home-farm. By-and-by he would fall naturally into his position as country squire; and it was arranged that eventually he should assume the name of Hammond; hoping to continue the old line.

This preamble being necessary, let us now return to the comfortable old-fashioned drawing-room at Westbury.

'What do you think of that, Ellen?' cried Miss Hammond, having read over once more the circular to herself with subdued emphasis. Miss Ellen was sitting looking into the fire, her great wooden knitting-pins and bright-coloured wools lying idle on her lap, as she shook her head while talking gently to herself.

'Do you hear, Ellen?' cried Miss Hammond more sharply. 'What do you think of that letter from Truscott?'

'I don't like the idea at all, Margaret. No, not at all. Why can't they leave our ancestors alone? And I am sure I always looked forward to being buried there myself.'

'La! don't talk about that, Ellen, and you five years the younger!' said Miss Hammond briskly; 'and as we can't prevent its being done, we must make the best of it. Ralph had better go and see to it.'

'Very well, sister; as you like,' said Ellen. Presently she resumed: 'Sister, I've been thinking that this would be a good chance to try to get back Uncle Richard Hammond's ring.'

'Uncle Hammond's ring!' repeated the elder sister. 'I don't understand.'

'You must have heard our father talk about it. The family ring that ought to have gone with the estates—a ruby and sapphire that General Hammond brought home from Ceylon.'

'I ought to know all about it, Ellen, I daresay; but you were so much more with my poor father, and had more patience with his stories.'

'My father often tried to get the ring, and had offered to give Major Hammond a large sum for it. But he was so vexed with father for supplanting him, that he vowed he never should have it; and they say, sister, that rather than it should ever fall into his brother's hands, he had it buried with him, upon his finger. Our father always said that if he had a chance he would have the coffin opened to see.'

Maggie, who had retreated to a sofa, and buried her head in a novel, roused up at this, and joined in: 'I hope you will, auntie. I do hope you'll have it looked for.'

'I don't know, my dear,' said Miss Hammond. 'I don't approve of violating the sanctity of the tomb.'

With the elder Miss Hammond, a phrase was everything; she delighted to bring a thing within

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WILLIAM BONNER,
Churchwardens.

The two Misses Hammond (Margaret and Ellen) are joint proprietors of the comfortable estate of Westbury, near Gigglesham, and of the handsome mansion thereto belonging. Maggie, the young girl, is a distant cousin—although she calls them 'aunt'—and lives with them. There is also a young man, Ralph Grant, somewhere about the place, of whom more.

Old Tom Hammond, father of the two maiden sisters, was born in the year 1740, and might have seen the heads over Temple Bar after the rising of 1745. He lived till 1830. He had married late in life, and left only these two daughters. Thus two generations bridged over a space of time generally occupied by many successive lives; as in the case of another branch of the family, the founder of which, Major Richard Hammond (the uncle of the two old ladies), who had been at the capture of Quebec when General Wolfe was killed, being the great-grandfather of Maggie Lauderdale and Ralph Grant. Major Hammond was the elder of the two brothers, and should have inherited the Westbury estate; but he offended his father, General John Hammond, by what was called a low marriage, and was disinherited in consequence.

Tom Hammond had done his best to remedy his father's injustice, as far as he could without injuring himself and his own, by making a settlement of the estate, in failure of his own issue, upon the lawful descendants of Major Hammond, his brother; providing that if the issue of his elder brother should fail, the estate should go to the issue of a younger brother Henry, who, by the way, had been well provided for by the small estate of Eastbury. This brother Henry was now represented through the female line by a Mr Boodles of Boodle Court, who now also held the Eastbury estate.

The descendants of Major Hammond are now confined to these two young people, Maggie and Ralph. They are both orphans and without means, their forebears having been mostly in the soldiering and official lines. Ralph is a lieutenant in the artillery, and his battery is now in India; but he is at home on sick-leave; and he has taken advantage of his furlough to win the affections of his fair cousin. As the Westbury estate would come to be eventually divided between them, it was considered a most fortunate thing that the young people had come to an understanding. Ralph was to leave the service when he married, and take the home-farm. By-and-by he would fall naturally into his position as country squire; and it was arranged that eventually he should assume the name of Hammond; hoping to continue the old line.

This preamble being necessary, let us now return to the comfortable old-fashioned drawing-room at Westbury.

'What do you think of that, Ellen?' cried Miss Hammond, having read over once more the circular to herself with subdued emphasis. Miss Ellen was sitting looking into the fire, her great wooden knitting-pins and bright-coloured wools lying idle on her lap, as she shook her head while talking gently to herself.

'Do you hear, Ellen?' cried Miss Hammond more sharply. 'What do you think of that letter from Truscott?'

'I don't like the idea at all, Margaret. No, not at all. Why can't they leave our ancestors alone? And I am sure I always looked forward to being buried there myself.'

'Let I don't talk about that, Ellen, and you five years the younger!' said Miss Hammond briskly; and as we can't prevent its being done, we must make the best of it. Ralph had better go and see to it.'

'Very well, sister; as you like,' said Ellen. Presently she resumed: 'Sister, I've been thinking that this would be a good chance to try to get back Uncle Richard Hammond's ring.'

'Uncle Hammond's ring!' repeated the elder sister. 'I don't understand.'

'You must have heard our father talk about it. The family ring that ought to have gone with the estates—a ruby and sapphire that General Hammond brought home from Ceylon.'

'I ought to know all about it, Ellen, I daresay; but you were so much more with my poor father, and had more patience with his stories.'

'My father often tried to get the ring, and had offered to give Major Hammond a large sum for it. But he was so vexed with father for supplanting him, that he vowed he never should have it; and they say, sister, that rather than it should ever fall into his brother's hands, he had it buried with him, upon his finger. Our father always said that if he had a chance he would have the coffin opened to see.'

Maggie, who had retreated to a sofa, and buried her head in a novel, roused up at this, and joined in: 'I hope you will, auntie. I do hope you'll have it looked for.'

'I don't know, my dear,' said Miss Hammond. 'I don't approve of violating the sanctity of the tomb.'

With the elder Miss Hammond, a phrase was everything; she delighted to bring a thing within

the compass of a well-rounded phrase, upon which she would then make a stand—invincible. So Maggie threw up her head in a kind of despair, and ran off to look for Ralph, who when last heard of was smoking a cigar on the terrace.

'Ralph!' said Maggie as soon as she had found him, and had submitted to a very smoky kiss—they were in the heyday of their young loves, when kisses were appreciated, even when flavoured with tobacco—Ralph's auntie is going to give you a commission—to go and see about a vault at St Crispin's where some of our ancestors lie.'

'I know,' said Ralph; 'they are going to pull the old place down. All right; I'll do it.'

Then Maggie went on to tell him about the ring, and how Miss Hammond would not have it searched for. 'But it is a very valuable ring—a family one too. It would be a great pity to miss it, if it's really there.'

Ralph agreed.

'Well, then, mind you look for it, sir; only don't say a word to auntie, or she'll put a stop to it!'

'I'm fly,' said Ralph, with a knowing wink, and attempted a renewal of the osculatory process; but Maggie escaped him this time, and came fleeing in at the dining-room window panting into the presence of her aunts.

Since she first left the room, a visitor had appeared—a Mr Boodles, a distant relative, who had inherited some of the family property, as before explained; a tall grim-looking man, with thin iron-gray hair, carefully brushed off his temples.

The aunts were looking rather serious, not to say frightened, and both started guiltily when they saw Maggie.

'Leave us, my dear, please,' said Miss Hammond gently.

Maggie had just caught the words, 'No marriage at all,' from Mr Boodles, who seemed to be speaking loudly and excitedly; and she went out wondering what it all meant. Some piece of scandal, no doubt, for Boodles was the quintessence of epitefulness.

'It is very dreadful—very,' said Miss Hammond. 'I never had much opinion of Uncle Richard, you know; but for the sake of the young people, I hope you'll let it be kept a profound secret.'

'Sake of the young people!' screamed Boodles at the top of his hoarse voice. 'And what for the sake of old Boodles? I'm the next heir, you'll remember, please, through my maternal grandfather, Henry Hammond.'

Mr Boodles had come to Westbury to announce an important discovery that he had recently made. In turning over some of his grandfather's papers he had come across some letters from General Hammond, in which it was firmly asserted that his son Major Hammond had never been legally married to the woman known as his wife.

'What end do you propose to serve, Mr Boodles, by bringing this ancient scandal to light?' asked Miss Hammond with agitated voice.

'And!' cried Boodles. 'This is only the beginning of it. I am going to a court of law to have myself declared heir to the Westbury estates under the settlement.'

'In that case,' said Miss Hammond, rising with dignity, 'you cannot be received on friendly terms in my house.'

'Oh, very well, very well,' cried Boodles, snatch-

ing up his hat and whip; and sweeping out of the room without further ceremony.

As soon as the door had shut upon him the sisters looked at each other in blank consternation. 'I always feared there would be a difficulty,' said Ellen tremulously; 'but oh, to think of Boodles having discovered it!'

'We must send for Smith at once; the carriage shall go in and fetch him,' said Miss Hammond, ringing the bell.

Mr Smith of Gigglesham was the family solicitor, and the carriage was sent off to bring him up at once for a consultation. But Smith brought little encouragement. He had heard from his father that there were curious circumstances attending Major Hammond's marriage, and if Boodles had put his finger on the flaw—Smith shrugged his shoulders for want of words to express the awkwardness of the case.

'But search must be made everywhere; the evidence of the marriage must be found; the children must not suffer, poor things, and always brought up to look upon the property as their own!'

'Why, they could never marry,' cried Miss Ellen; 'they could never live on Ralph's pay.'

'It's altogether dreadful; and not getting married is the very lightest part of the calamity,' said Miss Hammond.

Smith undertook that every possible search should be made, and went away, promising to set to work at once. But his inquiries had no result. He had traced out the family of the reputed wife, who had been the daughter of a small farmer living at Milton in Kent; but they had now fallen to the rank of labourers, and had no papers belonging to them, hardly any family traditions. He had searched all the registries of the neighbouring parishes: no record of such a marriage could be discovered. He had tested advertisements offering a reward for the production of evidence: all of no avail. What more could he do? To be sure there was a presumption in favour of the marriage; but then if Boodles had documents rebutting such a presumption—Again Mr Smith shrugged his shoulders, in hopelessness of finding fitting words to represent the gravity of the crisis. 'And then,' he went on to say, 'the very fact that Boodles is spending money over the case shews that he thinks he has a strong one.'

Boodles did not let the grass grow under his feet; he instituted proceedings at once, and cited all interested to appear. The thing could no longer be kept a secret; and Maggie and Ralph were told of the cloud that had come over their fortunes.

'I don't care if the property does go away,' said Maggie bravely. 'It will make no difference. I shall go to India with Ralph, that's all. I will be a soldier's wife, and go on the baggage-wagons.'

Ralph shook his head. He had never been able to manage on his pay when there was only himself, and there were ever so many lieutenants on the list before him, so that he could not hope to be a captain for many years.

There was no use in sitting brooding over coming misfortunes; and Ralph took the dogcart and drove over to Gigglesham, to see about the family vault at St Crispin's. It was an occupation that agreed well with his temper; the weather too seemed all in keeping—a dull drizzling day.

'Don't forget the ring,' Maggie had said to him at parting; 'that is ours, you know Ralph, if we find it; and perhaps it may be worth a lot of money.'

Ralph shook his head incredulously. And yet it was possible. The ring might be there, and it might prove of great value. In misfortunes, the mind grasps at the smallest alleviations, and Ralph consoled himself in his depression by picturing the finding of a splendid ruby worth say ten thousand pounds. No more artillery-work then—no more India.

Gigglesham boasts of several churches, and St Crispin's lies in a hollow by the river, close to the bridge. A low squat tower and plain ugly nave. But in its nook there—the dark river flowing by, the sail of a barge shewing now and then, the tall piles of deals in the timber-yard beyond, the castle-keep frowning from the heights, and the big water-mill with its weirs and rapids, the noise of which and of the great churning wheel sounded slumberously all day long—allied with these things, the old church had something homely and pleasant about it, hardly to be replaced by the finest modern Gothic.

Workmen were swarming about it now. The roof was nearly off. There were great piles of sand and mortar in the graveyard. Mr Martin, the plumber and glazier, who took the most lively interest in the underground work, even to the neglect of more profitable business, was on the lookout for Lieutenant Grant, and greeted him cheerily.

'We've got 'em all laid out in the vestry, Cap'n Grant, all the whole family; and now the question is, what are you going to have done with them? Would you like 'em put in the vaults below, where they'll all be done up in lime and plaster? or would you like 'em moved somewhere else—more in the open air, like?'

'The least expensive way, I should say,' replied Ralph grimly. 'Somehow or other his appreciation of his ancestors was deadened by this last stroke of fate in cutting him adrift from his succession. 'But look here, Martin,' he went on, taking the plumber aside; 'there is one of the coffins, Major Hammond's, I should like to have opened. It can be done?'

'Easy enough, sir,' cried Martin, who, to say the truth, was delighted at the prospect of a little charcoal-house work. 'He's a lead 'un, he is. I'll have the top off in no time.'

Ralph looked gravely down at the last remains of the Hammonds. The wife, if she had been a wife, on whom their inheritance hung, was not here; she had died in India. But there was the Major's coffin, the wood-work decayed, but the leaden envelope as sound as ever.

Martin was quickly at work with his tools. The cover was stripped off, and for a moment the Major's features were to be seen much as they had been in life; then all dissolved into dust.

There was no ruby ring—that must have been a fable; but there was something glittering among the remains, and on taking it out, it proved to be a plain gold hoop.

'Well, that's worth a pound, that is,' cried the practical Martin, carefully polishing up the treasure-trove. It had probably been hung round the neck of the departed—a tall bony man—for the ring was a small one, and there were traces of a black ribbon attached to it.

It was a disappointment, no doubt; and yet somehow the sight of the ring had given Ralph a little hope. It was the wedding-ring, he said to himself, his great-grandmother's wedding-ring. The Major must have been fond of her to have had her ring always about him; and it had been buried with him. That had given rise to the story about the ruby. He drove home, after giving directions about the disposal of the coffins, feeling less sore at heart. He was now convinced that they had right on their side, and there was some comfort in that.

When he reached home, he shewed the ring to Maggie, who agreed with his conclusions.

'But there is something inside—some letters, I think,' she cried.

'It is only the Hall-mark,' said Ralph, having looked in his turn. 'But stop. That tells us something: it will give us a date.'

'How can that be?' asked Maggie.

'Because there is a different mark every year. See! you can make it out with a magnifying-glass. King George in a pigtail.'

The silversmith at Gigglesham turned up his tabulated list of Hall-marks, and told them at once the date of the ring—1760.

'But it might have been made a long time before it was first used,' suggested Maggie.

'True; but it could not have been used before it was made,' replied Ralph. 'It gives us a date approximately, at all events.'

At first, the knowledge of this date did not seem likely to be of much use to them. But it gave them the heart to go on and make further inquiries. Ralph threw himself into the task with fervour. He obtained leave to search the records of the Horse Guards; and ascertained at last where had been stationed the regiment that Richard Hammond then belonged to in that same year.

It was at Canterbury, as it happened; and that seemed significant, for it was not so far from there to his sweetheart's home at Milton. Ralph went over to Canterbury, and with the help of a clerk of Mr Smith's, searched all the parish registers between the two places; but found nothing.

The trial was coming on in a few weeks, and not a scrap of evidence could they get of the marriage of Major Hammond. The other side were full of confidence, and well they might be. Ralph had made up his mind to return home, and was walking disconsolately down the High Street of Canterbury one day when he saw over a shop-window the sign, 'PILGRIM, Goldsmith; established 1715.'

'I wonder,' he said to himself, 'if my great-grandfather bought his wedding-ring there?'

A sudden impulse sent him into the shop. A nice-looking old gentleman, with long white hair, was sitting behind the counter, peering into the works of a watch through an elongated eye-glass.

Ralph brought out his ring. 'Do you think this ring was bought at your shop?' he asked.

'How long ago?' asked Mr Pilgrim, taking up the ring and looking at it all round.

'About the year 1760.'

'Ah-h! I can't remember so long ago as that. It was in my father's time; but for all that, perhaps I can tell you.'

He took up the magnifying-glass, and examined the ring carefully once more.

'Yes,' he said, looking up, a mysterious expres-

sion on his face, 'that ring was bought from my father, I have no doubt.'

Ralph questioned him as to the sources of his knowledge; and Mr Pilgrim told him at last. It was his father's practice to put his private mark upon all the jewellery he sold. He could do it in those days, when his stock was small and all his own. In these times of changing fashions, when much of a jeweller's stock is on approval, this would be impossible.

Ralph listened to these explanations with breathless impatience. Had Mr Pilgrim any books belonging to his father which might possibly shew the sale? The old gentleman admitted that he had a lot of his father's old account-books up in a garret; but it would be very troublesome to get at them; and what would be the use?

'Why,' said Ralph, 'you might possibly make the happiness of two young people, who otherwise may be sundered all their lives.' He explained enough of the circumstances to shew the old gentleman that it was not an affair of mere idle curiosity; and after that he entered into the quest with ardour. Pilgrim's father had kept each year a sort of rough day-book, in which he entered transactions as they occurred, with occasional short annotations. And at last, after a long troublesome search, they found the book for the year 1760 and 1761. Nothing was to be made of the first; but in the second they had the delight of finding the following entry: '25 March, sold ring, young Master Hammond, two guineas saw ye wedding afterwards at St Mary's, Faversham.'

That night all the church-bells of Gigglesham were set a-ringing, for the news oozed out that Ralph Grant had come home with full proofs of the marriage that would make good his title to Westbury. For the young people were liked by everybody, whilst Boodles was generally execrated. Indeed the case never came on for trial, as Boodles withdrew the record when he found that there was full evidence to refute his claim. Ralph and Maggie were married soon afterwards; and the bride wore as a keeper over the golden circle her own special dower, the long-buried but happily recovered treasure, Major Hammond's ring.

LOST IN MAGELLAN'S STRAITS.

ONE might look all the world over without finding a coast more bleak, desolate, and inhospitable than that of Tierra del Fuego and the southern part of Patagonia. Owing to certain meteorological causes, the cold is comparatively greater in the southern than in the northern latitudes; icebergs are found ten degrees nearer to the equator. In the Straits of Magellan, which are about the same distance from the equator as Central England, the cold in winter is so intense as to be almost unbearable. Here icebergs are found floating, and glaciers larger in extent than any Switzerland can boast of; the land is entirely covered with snow down to the very water's edge, while bitter piercing winds rush down the clefts in the mountains, carrying everything before them, and even tearing up huge trees in their passage. Not a pleasant coast this on which to be cast away; and yet such, in 1867, was the fate of two unfortunate men who formed part of the crew of Her Majesty's ship *Chanticleer*, then on the Pacific station; and an

account of whose sufferings we propose to lay before our readers.

One day early in September a sailing-party had been sent off with the hope of increasing the ship's stock of provisions by the addition of fresh fish, which is here very abundant. The nets soon became so heavy that extra hands were required to haul them; and as there appeared even then little chance of the work being over before sunset, the fishing-party obtained permission to spend the night on shore. Tents were pitched, huge fires were lighted, with the double object of affording warmth and cooking some of the produce of their successful expedition; blankets were distributed, grog was served out, and altogether the party seemed prepared to defy the cold, shewing a disposition to be 'jolly' in spite of it that would have gladdened the soul of the immortal Mark Tapley. However, after all these preparations to keep off the effects of the biting frost, they were compelled about nine o'clock in the evening to send off to the ship for more blankets and provisions.

Two sailors, Henty and Riddles, volunteered to go on this errand in the 'dingy' (a small two-oared boat), and having obtained the desired things, they started to return; but when about midway between the ship and the shore, the wind began to rise, carrying the boat to some extent out of her course; shortly after which she struck on a sand-bank, and in trying to get her off one of the oars was lost. Soon they were drifted out into the strong current. It was now dark as pitch; the wind continued to rise; and although all through the night they made every possible effort to reach the shore, when morning dawned, to their alarm they found themselves miles away from the ship, and powerless to contend any longer with their one oar against the force of both wind and tide. They were finally driven on to the beach in a bay opposite Port Famine, a spot not less dreary than its name.

The sea was so rough, that here for a day and a night our two men were obliged to remain; and when on the second day they ventured to launch the boat, it was upset; nearly all their things were lost, and they were left to endure the intense cold without the means of making a fire, with no clothes but those they wore, and scarcely any food. For a while they walked about, trying, not very successfully, to keep up circulation; and by-and-by the feet of both began to swell and grow so painful that it was no longer possible to keep on their shoes. Still, although suffering both from hunger and cold (Henty's toes being already frost-bitten), they kept up their spirits in true British fashion, not for a minute doubting that sooner or later they would be picked up; and true enough, on the fourth day the *Chanticleer* was seen in the distance under weigh, and standing over towards them. Taking the most prominent position that could be found, they made signs and tried in every possible way to attract attention, but in vain. If they had only possessed some means of kindling a fire they might have succeeded; but although those on board were at the moment on the look-out for their lost mess-mates, no one saw them; and the hope with which the two poor fellows had buoyed themselves up, faded away as the ship changed her course, grew smaller and smaller, and by-and-by, late in the

afternoon, while they still watched, altogether disappeared.

Although now their only chance of rescue was apparently gone, and the last scrap of food was consumed, yet the brave fellows did not despair. Their boat was very leaky; but on the 5th of September, having repaired her as far as possible, they took advantage of finer weather to endeavour to reach some spot where there would be more probability of getting rescued by a passing ship; but they had scarcely got half-way across the Straits before there was a terrific snow-storm; it blew a gale; the boat began to fill rapidly; and finally they were blown back again into the bay, upset in the surf and nearly drowned, being unable to swim through having lost the use of their legs from sitting so long in water. However, they were thrown up by the waves high, though by no means dry, and in this miserable plight and under a pitiless snow-storm, they were forced to remain all through the night. The next day they managed to erect something in the form of a hut, in which they might lie down and be to some extent protected from the weather, which was so boisterous as to render it useless to attempt to launch the boat. For some days, owing to exposure and want of food, they were both very ill; but still hoping for better weather, they kept themselves alive by eating sea-weed and such shell-fish as could be found, until the 12th of September, when the weather suddenly clearing, they again launched their small boat; and this time, after a day's hard toil, succeeded in reaching the opposite side of the Straits, where they had left the ship, which it is needless to say was by this time far away.

When first the men were missed, rockets had been fired, and blue-lights burned; and on the following day the cutter was sent to the westward, while the *Chanticleer* coasted along the opposite side; look-out men were constantly aloft; but nothing was to be seen of the missing men. The next day the ship had remained at Port Famine, and exploring parties were sent in all directions. On the third day they again weighed anchor, and examined a fresh piece of coast, but all to no purpose; and finally it was decided, with much regret, to give up the search, for every one concluded that the poor men must by this time have perished, even if they had survived the first night's cold, which no one on board thought possible. Both men were generally popular, and great grief was felt for their loss. Immediately a subscription was started by the whole ship's company for the widow of the one man and the mother of the other. Strangely enough, when the sad news reached England, the former, in spite of what seemed conclusive evidence, firmly refused to believe the assurance of her husband's death. Whether the wife's intuition or the more logical inferences of every one else proved correct, events will show.

By the time Henty and Riddles reached, as we have seen, the opposite side of the Straits it was quite dark; but on the following day they found that the current had drifted them fourteen miles from Port Famine, towards which they had steered, and for which place they now started on foot. Here they saw in the distance a ship under steam going towards the Pacific; but again all efforts to attract attention failed. They knew of no settle-

ment that they could hope to reach, and at this rough season there was not the slightest chance of falling in with any wandering tribes of natives. The only course left them was to endure the cold, wait as patiently as might be, in the hope of some ship passing within hail, and to keep up what little life remained in them by chewing sea-weed, and seeking and devouring the mussels, which fortunately were to be found in great abundance on the rocks. After a time, however, they grew so weak as to be only just able to crawl out of the place they had made to lie down in, and every day the effort to gather their scanty nourishment grew harder. Once more, on the 4th of October, they saw a vessel pass through the Straits, but were unable to make any signals; on the 7th, both men had grown too weak to stir, and nothing was left for them but to confront death. The 8th day passed, the 9th, the 10th, and they were still sinking slowly from starvation. On the 11th, when they could not possibly have lived more than a few hours longer, and had become little short of living skeletons, they were picked up by the officers of the *Shearwater*, and at once taken on board, where, after receiving the most careful attention, both, although still suffering greatly, began after a time to recover. Being conveyed by the *Shearwater* to Rio, they remained some time in the hospital there, and finally were sent home invalided; and yet both men lived to regain their full strength, and to serve as striking examples of what tough human nature can endure in the shape of physical hardships and mental anxiety. They had contrived, by a patience and energy almost unprecedented, to lengthen out existence for a space considerably over a month, with no other food than sea-weed and shell-fish; the last four days indeed eating absolutely nothing; while the whole time exposed to intense cold, the roughest weather, and more hardships than it is possible for those who have never seen that barren and desolate region even to imagine.

THE MONTH: SCIENCE AND ARTS.

MR T. M. READE, in his presidential address to the Liverpool Geological Society, discussed the question of 'geological time,' and took as an approximate measure thereof the denuding effect of rain-water on the earth's surface. The most rainy districts in England are those in which the oldest rocks prevail; but the average annual rainfall, including Wales, may be taken at 33 inches. Assuming the area of the two to represent one river basin, the quantity of water discharged in a year would contain more than eight million tons of solid matters; and at this rate, 12,978 years would be required to lower the surface of the land one foot. Analyses of sea-water shew that there are in 100,000 tons, 48 tons of carbonate of lime and magnesia, and 1017 tons of sulphate of lime and magnesia; and the ocean contains enough of the first to cover the whole of the land with a layer fifteen feet thick; and of the second to make a layer 267 feet thick. Twenty-five million years would be required to accumulate the one, and 480,000 years the other. Again, the total surface of the globe is 197 million

square miles. A cubic mile of rock would weigh 10,903,552,000 tons; so that, as Mr Reade states, 'to cover the whole surface of the globe one mile deep with sediment from the land at the rate of 800 tons per square mile of land-surface, would take 52,647,052 years.'

Geologists have speculated over this question many years: it has now passed into the hands of mathematicians, without whose aid it will never be settled. The Rev. Dr Haughton, F.R.S., of Trinity College, Dublin, in a paper read before the Royal Society on the last evening of their session, 'On the probable age of the continent of Asia and Europe, and on the absolute measure of geological time,' says that the elevation of Asia and Europe from beneath the deep waters, separated the earth's axis of rotation from the axis of figure by 207 miles, which would produce a large amount of wobbling. At present, 'astronomers are agreed that the motion of the pole is secular and very slow, all traces of wobbling having disappeared.' Then after a series of mathematical demonstrations, the doctor continues: 'The geological age of the continent of Asia and Europe is well marked by the horizon of the Nummulitic Limestones,' which extend from the Mediterranean to Japan. 'These rocks make up the backbone of the great continent, and at its formation were raised from deep water to form the highest chains of mountains in the globe. Geologically speaking, they are modern, belonging to the Lower Tertiary Period. My calculations assign to the Nummulitic Epoch a date not less than 4157 millions of years ago. No practical geologist will feel any surprise at this result.'

In a paper read at the last meeting of the Geological Society, Mr Belt discussed various geological questions, and shewed reasons for believing that in the far remote ages, the north of Europe was covered by a great lake. 'The formation of this lake was due,' he remarked, 'to the ice of the glacial period flowing down the beds of the Atlantic and Pacific, and damming back the drainage of the continents as far as it extended. To the rising of these waters must be ascribed the destruction of paleolithic man, the mammoth, and the woolly rhinoceros. This lake was once suddenly and torrentially discharged through the breaking away of the Atlantic ice-dam, but was formed again and ultimately drained by the cutting through of the channel of the Bosphorus.' It is perhaps well to remark that these views are not as yet implicitly accepted.

In the Eocene deposits of New Mexico a fossil bone of a gigantic bird has been found, which, according to the description, had 'feet twice the bulk of those of the ostrich.' This discovery proves that huge birds formed part of the primeval fauna of North America, and that they were not confined exclusively to the southern hemisphere.

Professor Kirkwood states, in a paper on the relative ages of the sun and certain fixed stars read to the American Philosophical Society, that the history of the solar system is comprised within

twenty or thirty millions of years; that our solar system is more advanced in its history than the constellation of the Centaur, and that the companion of Sirius appears to have reached a stage of greater maturity than the sun, while the contrary seems to be true in regard to the principal star.

The annual report on the great trigonometrical survey of India contains particulars which shew that surveying in India is by no means holiday pastime. Colonel Montgomerie, who has just retired after twenty-five years' service, was engaged during nine of those years in a survey of the dominions of the Maharaja of Kashmir, comprising about 77,000 square miles. Within this extensive area rise stupendous mountain ranges and peaks, the highest of which is more than 28,000 feet, and the Indus, Jhelum, Kishanganga, and other great rivers, flow through the valleys. To fix the position of heights and places in such a country requires a combination of courage, skill, and endurance rarely to be met with, but which happily for geographical science has been forthcoming ever since the Indian survey was commenced. The annual reports contain many accounts of adventurous journeys, and hazardous exploits which few readers would think of looking for among the dry details of a scientific triangulation. Sometimes on resuming work after the rainy season, the 'rays' or lanes which had been cut through the forest to clear a way for taking distant sights, would be found so choked by the shoots from tree-stumps and young bamboos which had grown to an 'astomishing height,' that more than thirty miles of such rays had to be cleared over again before the work could proceed. On extending the survey into Burmah it was only by cutting tracks through the dense forest that communications could be effected from station to station, and whenever an existing road could be made available it was regarded as a luxury. At Kamadabo it became necessary to carry the great theodolite to the top of a rocky hill: the sharp projecting rocks 'jutted out in every direction,' and as they could not be removed, ladders were stretched from rock to rock, and thus a most perilous ascent and descent was accomplished. The labour and risk may be judged of from the fact that the theodolite weighed more than six hundred pounds, and we can appreciate the satisfaction with which the observer wrote in his journal, 'it was a day of rejoicing when the instrument was brought down in safety.' At times a region of sand-hills was traversed where vision was not obstructed, but where not more than three walls of drinkable water were found in a distance of seventy miles. And once the observer waded through a mile of mud and water under a burning sun to an old lighthouse whence it was essential to take angles to fix the position of the new one five miles distant. A consequence of this exploit was an attack of malarious fever.

It seems likely that trigonometrical surveying may be carried on with less difficulty in future: for an Italian officer of engineers, Lieutenant Manzoni, has proved that the triangulations can be photographed. It is possible to construct a camera geometrically arranged, and if the rays of light converging from distant points of view are intercepted, and marked on a diaphragm, it is evident that the angular readings obtained to such points would be identical in their bearings with the

objects themselves. By such a camera, negative views of inaccessible ground can be faithfully taken, and the angles can be either plotted or calculated. Photography thus offers itself as a means whereby a difficult mountain country can be surveyed without risk, while for purposes of military reconnaissance its advantages are obvious.

For some time past attention has been directed towards steel-wire cables; and experiments recently made in Portsmouth Dockyard have clearly demonstrated their superiority over hemp and iron. Steel, as is well known, is more and more used in the building of ships, and, because of its tenacity and lightness, in their rigging; and now it seems likely to supersede the unwieldy hawsers and chain cables everywhere in use. With a chain the safety of the ship depends on the weakest welding; and when a single link parts, either from inherent defect or from a sudden jerk, everything parts, and the vessel drifts. A wire cable, on the contrary, gives notice, so to speak, of an approach to the breaking point. First one strand, then another, gives way, and still the cable holds, and it may happen that it will hold long enough to save the ship. Now that experiment has proved that a steel-wire cable is as flexible as the best hemp, that it is three times as strong, and does not cost more, the change from one to the other may be made with confidence. Another advantage is the lightness, for by making use of steel, about two-thirds of the usual weight of the cable is got rid of. Evidence of the strength is seen in the fact that a three-inch steel hawser did not break until the strain exceeded twenty-two tons, and that a strain of more than a hundred tons was required to break the six-inch.

Lieutenant Totten of the United States Army, in writing about explosives and big guns, discusses carefully the question as to the best kind of explosive for actual service; that which will expend its entire force in driving out the projectile. With the large-grained gunpowder now in use about half of the charge is wasted, while gun-cotton and dynamite exert an injurious strain upon the gun. As a way out of the difficulty, he recommends a 'compensating powder,' each grain of which contains a core of gun-cotton, and he points out that forty pounds of this powder would be sixty pounds stronger than a hundred-pound charge of gunpowder. The explanation is that by the time forty pounds of the hundred are burned, the shot has left the gun; consequently, sixty pounds are of no help to the shot. But if the forty pounds contain fifteen pounds of gun-cotton, then this cotton, when fired, acts on the already moving shot under the most favourable circumstances as a pure accelerator, and does not injure the gun. In this way, writes Lieutenant Totten, 'we eliminate the great waste of the one, curb the straining action of both, and obtain a true artillery powder, lighter, and four and a half times more effective, charge for charge, than our best gunpowder.'

An address 'On Light in some of its Relations to Disease,' delivered to the Albany Institute (State of New York), by Dr. Stevens, sets forth views and facts which are worth consideration. Light, as we know, is on the whole beneficial; but may there not be cases in which it is harmful when passing through the transparent media of the human eye? Dr Stevens is clearly of opinion that many nervous diseases are aggravated if not pro-

duced by defective vision. The strain on the muscles of the eye, when long continued, sets up an irritability which tells injuriously on the nervous system, and on neuralgic affections. St. Vitus's dance and severe periodical headaches are the consequence. Rectify the imperfection of the sight, says Dr Stevens, by proper spectacles, and the nervous disease will be either mitigated or cured. It is of no use to buy glasses at hazard because they seem to suit the eye; for none but a scientific oculist can really decide, after careful experiment, on what is proper. In many cases the focus of the two eyes is not the same, and each must have its proper glass. Professor Donders of Utrecht was the first to point out that the so-called 'cylindrical glasses' were generally the most efficient; and since then 'the science of correcting anomalous refractions of the eye has been brought to a perfection which is truly wonderful.'

Dr. Ponceau of Guadeloupe has published a series of tables, based on the changes of the moon, by which, as he believes, it is possible to tell the sex of a child before birth. He intends to draw up similar tables for the use of horse and cattle breeders; and if any one should test his calculations by observation, the doctor would like to be informed of the result.

The *Journal* of the Chemical Society contains an account by Mr Hight, of the Indian Forest Department, of experiments made with a view to ascertain the practical nature of a proposed method of determining the mineral strength of soils by means of water-culture. It is explained that the usual object of water-culture experiments is to find what particular salts are congenial or necessary to the growth of any particular plant. When a plant is grown in an artificially prepared solution, so that it can obtain its nourishment solely from the salts contained in that solution, the exact effect of any salt upon the growth of the plant can be easily observed by adding that salt to, or abstracting it from the solution. In carrying out this method, specimens of soil were taken from five different forests in India; solutions of these specimens were made; seedlings of *Acacia arabica* were, with proper precautions, placed in each, and the results of growth, such as increase in weight, number of leaves, and length of roots, were carefully noted. These results are published in a numerical table, and allowing for the difficulties of a preliminary experiment, may be regarded as satisfactory.

The question is frequently asked—Why is there no School of Forestry in England, while in almost all other countries of Europe schools of forest science are either established by the government, or are associated with a university or a polytechnic institution? Sir Joseph Hooker, President of the Royal Society, and Director of the Royal Gardens, Kew, says in one of his reports, that the subject is so neglected in this country, that when our government are in want of a forest inspector for India, they have first to send him to France or Germany to learn the theory and practice of taking care of a forest. On the continent, as Sir Joseph remarks, 'forestry holds a distinguished place among the branches of a liberal education. In the estimation of an average Briton, forests are of infinitely less importance than the game they shelter, and it is not long since the wanton destruction of a fine young tree was considered a venial offence compared with the snaring of a pheasant or rabbit.

Wherever the English rule extends, with the exception of India, the same apathy, or at least inaction, prevails. In South Africa, according to the colonial botanist's report, millions of acres have been made desert, and more are being made desert annually, through the destruction of the indigenous forests; in Demarara the useful timber trees have all been removed from accessible regions, and no care or thought is given to planting others; from Trinidad we have the same story; in New Zealand there is not now a good Kauri pine to be found near the coast, and I believe that the annals of almost every English colony would repeat the tale of wilful wanton waste and improvidence. On the other hand in France, Germany, Switzerland, Austria, and Russia, the forests and waste lands are the subjects of devoted attention on the part of the government, and colleges, provided with a complete staff of accomplished professors, train youths of good birth and education to the duties of state foresters. Nor, in the case of France, is this practice confined to the mother country: the Algerian forests are worked with scrupulous solicitude, and the collections of vegetable produce from the French colonies in the permanent museum at Paris contain specimens which abundantly testify that their forests are all diligently explored.

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The once trim walks were coated thick with moss;
Dwarfed were the garden roses, and their glow
From vivid crimson paled to fainter gloss
Nigh broken sun-dial; and the water's flow
Had ceased to murmur in the ancient foss,
Whose slopes were now with purple thyme a-blow;
And on the fragments of the crumbled wall
The golden wall-flower stood like seneschal.

The nut-trees made an archway overgrown,
And midst the boughs the timid squirrel leapt;
At eve the nightingale with mellow tone
Sang with the mourning wind a dirge that crept
Into all hearts—until one heart more lone
Than others, gathered up the strain and wept;
Nor knew if 'twere half joy or wholly grief
That in the sympathetic chord had found relief.

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As though some spectral life were there upstirred;
And as the fitful breezes onward pass,
A murmur of strange voices might be heard,
As though some unseen quire were chanting mass,
Behood throughout the grove by plaintive bird;
And still the wanderer listening, asks for whom
The wild Amen!—For whom the flowers did bloom?

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And rotting pillars where the woodlilies twine;
And on a cobwebbed solitary pane
In easement, that with colours once did shine,
And showed the seasons through each differing stain,
Was writ in jagged-wise a Latin line,
'*Sic transit gloria mundi*;' and below,
'My Ursula! the world is full of woe.'

It read as epitaph above the grave
Of human hopes, all blighted as the space
Around, whose wreck no hand was stretched to save;
Yet that with tender melancholy grace,
A sermon in that blooming desert gave
To him whose soul had power enough to trace
In the lone scene, so desolate, so lone,
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Ah! could the olden stones a story tell,
How sweet a love-ode might they not reveal
Of mystic Ursula, and what befell
In the fond hopes and doubts that lovers feel,
Till blighted by that sorrowful farewell
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Shattered the rainbow in fresh gathered cloud,
And changed the bridal robe to funeral shroud.

Perchance her monument this wildered spot,
Tended by Nature's pitying hand alone,
For one by generations now forgot,
To whom he roared no proud sepulchral stone;
But with love's jealousy he willed that not
Another o'er her grave should make his moan—
But he alone through hieroglyphic bloom,
Should haunt the precincts of the loved one's tomb.

Ay, who can tell! For Time his seal hath set
On life and all its secrets gone before;
The hearts are dead that never could forget;
The hearts that live, but know the tale no more.
Each hath its bitterness o'er which to fret,
Each hath its joys eclipsing those of yore;
To each its own small world the real seems,
Outside of which is but a land of dreams.

Yet still one loves to linger here and muse,
And conjure up vague theories of the past;
And here a hand to trace; and there to lose
The touch of human life upon it cast;
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A WORD ON RICH FOLKS.

WE have never quite understood why among preachers and moralists there should be such a sweeping denunciation of riches. The rich man is called all that is bad. The poor man—no matter that he had been a spendthrift—is prescriptively an ill-used saint, for whom not enough can be done. The older notions on the subject perhaps originated in the fact that riches were too frequently accumulated by robbery and oppression; which is not unlikely, for until this day in certain eastern countries, of which Turkey is a luminous example, riches are usually a result of some sort of extortion, if not actual violence. And if so, we need not wonder that the poor were reckoned among the oppressed and specially worthy of compassion.

However the ancient opinions regarding riches originated, it is surely full time that new and more rational views were entertained, or at least professed, on the subject. In Western Europe, men do not now go about plundering and oppressing by armed force, as in the days of old. The poorest are protected by the law. As a general rule, riches are accumulated by a course of patient industry, and the reputedly wealthy are among the most careful in setting the example of doing good. Of course our mixed state of society is not without instances of wealth being realised by jobbery, by fraudulent exploits among speculators. But these are exceptions which a wise man does not fasten upon, except to point the moral, that ill-gotten riches seldom last long, and that their possessors are anything but respected. Why then persist in holding up the wealthy to reprobation? The truth is, the cry is little better than a sham. The very preachers who talk reprobation and warningly of riches, seldom fail to be as zealous in the pursuit of riches as their neighbours. And in this no one can rationally blame them. Every man within his proper calling is entitled as a matter of duty to himself and those dependent on him to use all legitimate means for bettering his condition, and, if possible, increasing in wealth.

It is indeed only by the prudential exercise of these privileges that society is held together and advanced in civilisation. It is very pleasant to see honest poverty decently struggling with circumstances, and maintaining a good character amidst adversity; but we deny altogether that poverty alone is synonymous with virtue, and to be held up as meritorious. Without riches even comparatively small, little good can be done. Wealth—meaning by that a surplus of gains beyond what are required for daily subsistence—is obviously the source of universal comfort. Money is above all things potential. It hires labour, gives the employment which so many stand in need of. It sets up manufactories, organises railways, puts ships on the ocean, pays for machinery, builds and improves towns, schools, and churches, encourages learning, enlarges processes of husbandry with a view to ever-increasing demands for food. The most skilful and willing workman, when placed in a country without money wherewith to employ him, is as helpless in the attempt to realise the wages of labour as the merest savage. In short, it is clear that before work can be given, there must in some measure be an accumulation of capital, or in plain language savings, in the hands of a part of the community.

Such being the case, how absurd does it seem to disparage money, as if it were something sinful and dangerous. As well disparage man-power, horse-power, steam-power, or any other power. As a force, money is neither hurtful nor beneficial, neither bad nor good in itself. All depends on the way in which it is used or directed. Gunpowder can blast a quarry and bring forth stones with which a hospital may be built; but the same gunpowder in the hands of the Russians or Turks can blow thousands of men into eternity in a single day. A rich man, if he be unselfish, has in his wealth the power of making his fellow-creatures less coarse, less depraved, and as a consequence, less miserable. From the vantage-ground of high position he can fight a chivalrous battle for the afflicted and him that hath no helper. His good example will have far more effect than that of a

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poorer man. His influence, if directed to good and merciful objects, is as powerful for good as that of the selfish rich man is for the reverse. 'Nobody would be rich,' said Goethe, 'but those who understand it.' But when a man owns gracefully and usefully, what good may he not do in the way of opening a path for others, and giving them access to whatever civilising agencies he may himself possess! Therefore we can understand how both religion and philanthropy may treat with respect and even with reverence the motto, 'Put money in thy purse.' May we not even say that it is the desire to 'get on' and to become rich that prevents our sinking into barbarism?

'There is always a reason in the man,' says Emerson, 'for his good or bad fortune, and so in making money.' This rule is not without exceptions, for now and then people do become rich by lucky or even by dishonest 'hits'; nevertheless money is in the main representative. Show me a man who has made fifty thousand pounds, and I will shew you in that man an equivalent of energy, attention to detail, trustworthiness, punctuality, professional knowledge, good address, common-sense, and other marketable qualities. The farmer respects his yellow sovereign not unnaturally, for it declares with all the solemnity of a sealed and stamped document that for a certain length of time he rose at six o'clock each morning to oversee his labourers, that he patiently waited upon reasonable weather, that he understood buying and selling. To the medical man, his fee serves as a medal to indicate that he was brave enough to face small-pox and other infectious diseases, and his self-respect is fostered thereby. The barrister's brief is marked with the price of his legal knowledge, of his eloquence, or of his brave endurance during a period of hope-deferred brieflessness.

But besides its usefulness and its being the representative of sterling qualities, the golden smile of Dame Fortune is to be sought for the invaluable privilege of being independent, or at least being out of the horrid incumbrance of indebtedness. A man in debt is so far a slave; while it is comparatively easy for one possessed of ten thousand per annum to be true to his word, to be a man of honour, to have the courage of his opinions. When a man or woman is driven to the wall, the chances of goodness surviving self-respect and the loss of public esteem are frightfully diminished. But while striving to escape from the physical suffering and the mental and moral disadvantages that attend the lot of poverty, we should admit to ourselves the fact, that there are hardly less disadvantages and temptations ready to make us miserable, if we are not on our guard after attaining to a reasonable amount of wealth.

In a meeting assembled to make arrangements for Mr Moody's last preaching campaign in London, one of the speakers expressed his hope that Mr Moody would 'do something for the miserable poor of London.' 'I shall try and do so,' was the preacher's reply; 'and I hope also to be able to

do something for the miserable rich.' 'The miserable rich!' Some would think the expression almost a contradiction in terms, but it is not; for the rich, while possessing the means, as we have already said, of doing vast good, have nevertheless many things to render them unhappy.

Great wealth is a heavy burden; the life of a rich peer being described as 'made like the life of an attorney by the extent of his affairs.' Even their most cherished means of enjoyment may become the possibilities of vexation to the rich. Some may think it is a fine thing to be a landlord, but there is hardly any position more irksome. There is no end of trouble with tenants. The same thing with servants. People who have many servants are sometimes worse served than those who have only one; for what is every one's business is nobody's, and each individual servant is ready with the answer: 'Oh, that is not in my department,' when asked to do anything. The more valuable is your horse, the greater is your anxiety about his knees. It is proverbially difficult for a lady to be 'mistress of herself though china fall;' but if the sound of broken *delf* rise from the kitchen, 'Another plate' is her indifferent remark. The fact is, every new possession becomes an additional something to be looked after, and adds almost as much to our anxiety as it does to our comfort. There is sound philosophy in the answer a king is related to have given to one of his stable-boys, when meeting him one morning he asked him: 'Well, boy, what do you do? What do they pay you?' 'I help in the stable,' replied the lad; 'but I have nothing except victuals and clothes.' 'Be content,' replied the king; 'I have no more.'

Occasionally there cast up in our social circle rich folks in an unhappy state of cynicism. They are at a loss what to do with their money. In making their will they demonstrate all sorts of whimsicalities, passing over any recognition of their oldest and most deserving friends, and leaving their means in some odd fashion which everybody laughs at. In such instances it is curious to note the anguish they experience in being asked to assist in charitable contributions. In Dr Guthrie's Autobiography there is a good illustration of this unhappy state of cynicism into which the rich are prone to fall. There he relates how, in a winter of extraordinary severity, he made an appeal to a lady who had succeeded to a prodigious fortune, on behalf of the starving poor of his parish. In doing so he had no ~~very~~ sanguine hope of success. On being ushered into her room, she turned round, and shewing her thin spare figure, and a face that looked as if it had been cut out of mahogany, grinned and said: 'I am sorry to see ye. What do you want? I suppose you are here seeking siller?' 'The very thing I have come for,' was the Doctor's frank reply. Her next remark demonstrated how little power her riches had of conferring happiness; and with all her wealth of flatterers, what a poor,

lonely, desolate, miserable creature this possessor of more than a million sterling was. 'Ah!' she said, 'there is nobody comes to see me or seek me; but it's money, the money they are after.' We are glad to be able to relate that this miserably rich old lady gave to Dr Guthrie fifty pounds for the poor—an act which we hope shed a gleam of sunshine into her dark life.

It comes pretty much to this, that with riches there are sundry drawbacks, and that rich people are sometimes as much to be pitied as envied. All know the sharp penalties exacted by nature from those whose only business in life is the pursuit of merely personal gratifications. Wealth gives importance and satisfaction only in proportion to its being administered to a useful purpose. Unhappily, as has been said, there are miserable men; but their misery is due to themselves. They have failed to see the vast capacities for doing good with which they have been charged. A wealthy person who spends the bulk of his time in the cruelties of pigeon-shooting, or in some other 'sport' connected with the coarse, wholesale destruction of innocent creatures, can be called neither a great nor a good man. At best, we can estimate him as an accomplished gamekeeper.

Luckily, and influenced by the wide expansion of modern ideas, the rich, in the main, rise above paltry gratifications. There is obviously an immense outgrowth in the generous distribution of wealth. In innumerable cases, the rich have a difficulty in determining how to expend their money in a way that will prove beneficial. The question, 'To whom or to what cause shall I contribute money?' must be a very anxious one to conscientious men of wealth. 'How are we to measure,' we may suppose rich men to ask, 'the relative utility of charities? And then political economists are down upon us if by mistake we help those who might have helped themselves. It is easy to talk against our extravagance; tell us rather how to spend our money as becomes Christians;' that is to say, for the greatest good of the greatest number. The fact is, riches must now be considered by all good men as a distinct profession, with responsibilities no less onerous than those of other professions. And this very difficult business ought to be learned by studying social science, and otherwise with as much care as the professions of divinity, law, and medicine are learned. Were the rich in this way to accept and prepare themselves for the duties of their high calling, no one would grumble, because in the nature of things money tends continually to fall into the hands of a few large capitalists.

The value of riches, then, depends on the use that is made of them. No doubt, as hinted at, they are often abused by the thoughtless, the dissolute. But look at the many grand results of properly employed wealth! Consider what is daily being effected in our own country alone by the beneficence of wealthy individuals. What number of charities supported, what churches built, what schools set on foot, what vast enterprises of a useful kind entered into for the general benefit of

society. On these considerations, what a farce is that silly declamation against the possession of riches, in which certain orders of persons are indiscreetly pleased to indulge!

FROM DAWN TO SUNSET.

By 'ALASTAIR GRAHAM.'

IN THREE PARTS.—PART II.

CHAPTER THE NINTH.

THE morning after Kingston's arrival and after their early breakfast, Deborah followed her father into his 'den'; he was already equipped for riding, and was drawing on his gloves.

'Late hours suit thee not, Deb; thou'rt looking pale, my Rose.'

'I am well enow. But father, I don't want you to take yourself away to-day; it seems unmannerly to Kingston. He will not care for my dull company alone. Do stay, my father! She put her arms round his neck.

'Why, this is a new request! Thou'rt safe from all lovers while King is with thee. Pshaw! little one, I must go; I have pressing business. King will be proud to hear thee company. He raves about thee. Take him to the vicarage, or to ride.'

'No. Stay, father.'

'Sweet heart, I cannot. Ye look scared. I will send King away, and have Mistress Dinnage sent to ye. Ye're not well.'

'Indeed I am. Well, go, father; I will ask ye no more. Nay; I am all right; but it grieved me for Kingston.'

Sir Vincent laughed. 'Grieve not for him.'

And so Deborah and Kingston Fleming found themselves alone, for Mistress Dinnage, though urgently pressed by Deborah, was too proud to bear them company.

Deborah put a brave careless face on the matter. 'What will ye do, King?' she asked. 'I am going out for flowers. It is too hot to ride till evening. Will ye go your ways till dinner, or will ye be a carpet-knight, or what?' Truly, there was as much repulsion as invitation in Deborah's question, as she stood looking up, with her hat tied down and her basket on her arm; and though at that moment there was no vestige of coquetry in her manner, that upturned face could not look but lovely.

Kingston, half smiling, half mortified, answered: 'Well, I thought o' no other plan but to bide with you, Deb; but if ye are anxious to be rid o' me, I am off.'

'Nay!' Deborah laid her hand upon his arm, all penitent. 'Come with me. I will not deign to answer your insinuation. I will shew ye all the old haunts; the green paths where we played and romped, King, in the good old days.'

'Ye speak like a grandmother,' said Kingston, as they went down the long gallery together. 'The good old days! And what are these? You are a child as yet. I truly have cares and troubles.'

'You have not!' Deborah gazed up at him with her clear eyes, reproachful, yet laughing. 'Everything comes to your hand,' said she; 'work, travel, honours, a lady-love. Ye have all that life can offer, and yet are not content.'

'Content? No; I am not!' Kingston stopped, and gazed at the 'Mistress Mary Fleming' whose picture hung above them. 'Here is our ancestress, Deb, the "beautiful Mary Fleming." She resembles

you. The same eyes, the same trick o' the eyelids, the same mocking, winking smile. Here she is, but seventeen, unweild still, but her fate is hanging over her. At eighteen, she was married to an old rich rake. She went mad in time, and they tell us, "died young;" the best thing she could do. Why, she had better have kept her name of Fleming, for she had a sad life of it. But she had a soft, tame, yielding nature; there was excuse for her. The Fleming fortunes too were at a perilous low ebb; and it is needful ever to mend the fortunes of a bad off the parent stem to mend the fortunes of the house. That was arranged. What is the worth of beauty but to win gold? Thy beauty, poor Mary Fleming, won a fortune; thy sweetness and worth were sold to the highest bidder! It was for thy kindred's sake. Truly, it was a noble act!

'Who told you this?' asked Deborah, gazing gravely up at her beautiful ancestress with a heightened colour and intense interest. 'I never heard the tale. O yes; surely I heard it long long ago, and thought it was a wicked act of hers. For had she not another lover—one that she really loved, young and noble?'

Kingston laughed cynically. 'O yes, but poor. What was that? A victim more or less never mattered. There were a dozen went to the dogs for her. She looks like it—doesn't she? That invincible spirit of coquetry could never have been quenched; it lurks in her eyes, on her lips. She deserved her fate.'

'Kingston, you are hard and cruel. Success has not sweetened you. I respect poor Mary Fleming!'

'Because you would have done likewise?' he asked, gazing down into her eyes fiercely and sardonically.

Half angered, she turned away, yet with a smile that was full of tender trouble, tenderness sweet and strange. Kingston brooded over that smile, and liked it not. That smile would seem to shew that Deborah had a lover. Who was Deborah's favoured lover? Kingston even remembered the daisy long ago. They had not another word to say till they reached the garden. There lay the quaint flower-borders, smelling of a thousand sweets, where bees and butterflies made up the jewels, and many a darting dragon-fly. And away in the background stretched cool and deep green woods, and a green path of tender shade, where stood a rustic seat. Oh, such a seat for lovers! And the tall bright foxglove reared its dappled bells about the gloom. Kingston's dreaming eyes took all in unconsciously, while Deborah cut and piled up a blooming heap of flowers.

'Now we have done,' she said. 'I must go and arrange them. Mistress Dinnage arranges beautifully.'

'Don't go in, Deb; the sun thaws me. I am cold. Feel my hand. I thought I was to be shewn the "old haunts".'

Deborah blushed. 'O yes,' she answered hurriedly, avoiding his eyes again. 'The flowers must die, then, King.'

'Let them! A thousand flowers have had their reign at Enderby in these two years, and millions more will bloom and die before I see Enderby again!' He spoke hurriedly, emphatically.

Deborah gazing up at him, turned pale. 'What! are you going to die, King?'

'Nay, Deb, sweet heart; I can come here no more. Ask me not why. I can tell you—nothing.'

'Oh, I like not to hear you talk like this, King. You had a bright gay spirit once. I live in an atmosphere where, it is true, all is bright and beautiful and home-like, and but too dear! Yet I feel it is volcanic land; and beneath our feet, King, I hear the thunder-mutterings; and above our heads, King, it seems to me there often rise clouds black as night; for ye know how it is with us. But to your coming I looked for comfort. In father's and Charlie's faces I often find paleness, apprehension, gloom, through all their looks of love for me; and a foreboding chills my heart. But you were never wont to be like this. Now it seems to me your looks portend just such gloom and mystery. Ye are sad; ye are not yourself. What ails you? Is there no lasting sunshine in life?'

'Not in yours, Deb, unless matters take another turn with you. Things are dark with your father, my little one. He has told me much. For one thing, I thank God, Deborah, that you have refused the Lincoln bait they tempt you with. Listen to no one who may lure you to such utter ruin. I know that man now. You were better dead than Mistress Sinclair.'

'No fear of that.—But shall we indeed be ruined, Kingston?'

'Things look dark. Could ye bear to lose Enderby, Deb?'

'Lose Enderby!' Her paling lips shewed that the girl had never contemplated that. 'Nay; I know not how to bear it. Is it sure?'

'No; but I thought it best to prepare you for any emergency. Heaven grant you may have some one to take care of you in this uncertain future!'

'I have a father and brother,' exclaimed Deborah proudly.

Kingston laughed with some bitterness. 'Ay, you have.'

'Have ye ought to say against them?'

Kingston glanced with his old rivalry at the flushed cheeks and flashing eyes. 'I dare not say it, if I had. Yet I wish I could get hold of that fellow Charlie; I might bring him to reason, if I could find him out.'

'He will come when he knows that you are here.'

Kingston doubted this in his own mind.

'Dear old Enderby!' muttered Kingston, as they strolled up the winding woodland path. 'With no home of my own, here I have always found one. It is *our* home, Deb. Can we leave it? Can we? I never thought it was so dear till now.'

Deborah did not answer. Her breast was heaving tumultuously. He saw that she was weeping silently and bitterly. She sat down on the shrubbery seat, and Kingston walked slowly on. He soon returned, guessing rightly that Mistress Fleming would be proudly herself again.

Deborah and Kingston saw not much more of each other that day till they rode together in the evening. It happened that Mistress Dinnage stood by her father's side and watched them.

'They make a pretty couple,' said old Jordan through his smoke. 'He's more her match than Master Sinclair. 'Twould be a sin and shame to give pretty Lady Deb to him. Why, Master Charlie would run him through first!'

'That he would; and so would she, father, bless ye! Ye don't get know our Lady Deb, if

you think such a thought. See him go out through this gate, father, times on time, the old sharp fox! his eyes glowering, as he could murder me. He has caught it *then*; and I have well-nigh laughed in his face. I hate the cunning bad old man, with his tall hectoring air. I wish Master Charlie would horsewhip him soundly.

Old Jordan chuckled over his pipe, glorying in the spirit of Mistress Dinnage. 'Ay, ay; I wish he would, Meg. Young giant! Many's the time I've horsewhipped he. He'd laugh in my face for my pains now.'

That night the two girls were in their favourite walk, while Sir Vincent and Kingston were indoors. 'I shall owe you a grudge, Mistress Dinnage.'

'Why?'

'For leaving me all day with my cousin Kingston.'

'I would have ye be together!'

'This is not like you. Can it end but in misery? Oh, the Fates send him soon away from Enderby! Meg, he likes me well—far better than he did formerly; but oh, man-like, he would fain get the better of my heart by fair fair words.'

'And why?' cried Mistress Dinnage impetuously. 'To hold and cherish it! What is this Mistress Blancheflower? Can she compare with thee? Would he linger here?—'

'Hush, hush! He is betrothed. When he weds, thou and I will run away and hide till it is all gone by. My heart will not break, sweet; do not think it. I am too proud.'

They wrung hands; and Mistress Dinnage sped away like a deer, for King Fleming's tall figure emerged from the garden-door in the wall.

'Plotting, plotting!' he said. 'My pretty conspirators! I wish I had caught you in it. That was Mistress Dinnage. I know her pace. How is it that the pretty lassie is not wedded out of harm's way?'

'Because Mistress Dinnage only weds for love.'

'So she lives to do mischief. O Deb! look, there was the daisy-scene! There lay you, and there stood I. Deb, I would give up all the good of my years of toil to be a boy again!'

The blush had not faded from Deborah's face when he looked at her. 'We all feel that,' she responded. 'How you did tease me, King!'

He smiled. 'I should love to tease thee now, if I had ease of mind. Give me your hand, Deb. Now climb, and gather that rose, and give it me with a gracious grace, as I saw you give to another.'

'I never climbed, though. Will *this* not content you, Master Fleming?'

'Nay, the highest, the highest! the "Rose of Enderby." I was blind, I was stone-blind! I never cared for roses; the taste comes too late. A student's life kills joy, and men grow blind in burrowing in books.'

'Well, there! Can your old blind eyes see that? I will fasten it in your coat.—Nay, you shall not, Kingston Fleming!' Deborah started back, with all her fiery soul blazing in her eyes, for Kingston would fain have drawn her to him and thanked her with a kiss. She plucked the rose to atoms and scattered it in the night air. 'Some maidens might think this counsilly of you; not I. I will not abide this familiarity.'

His face looked pale and changed in the moonlight. 'Have I offended you, Deborah? Can I

not even be your brother—for love of the olden time? Nay, see me! Look on me, Deb; I have need of pity. Do ye not see I am in trouble?'

All the girl's passion vanished; she drew near and laid her hands in his; she felt those strong hands trembling like leaves in the wind.

'In trouble, King?' she asked tenderly and piteously, with her sweet face upturned. 'Ye are ever hinting this; yet never win the courage to tell me where this trouble lies. Trust Deborah Fleming! She is the receiver of troubles; she is used to them. Deborah Fleming can prove a truer sister to you, perchance, than by idle words and caresses.'

But the strangely sensitive and impassioned nature of Kingston Fleming was all stirred and tempest-tossed; the gay calm summer sea was swept by a great storm-wind, which stirred the depths beneath.

'Nay, child,' he whispered, with hurried agitated breath; 'I cannot tell. Thou'lt hate me, Deb—hate me. I cannot afford to lose thy friendship even. Deb, I have few true friends. But above all, I have been mine own worst enemy! Ah Deborah, *I am most miserable*.' His head sank: lorn, dejected, despairing, he stood before her, the wild, high-spirited, light-hearted Kingston Fleming!

'Thou shalt not be miserable,' said Deborah, trembling herself, and her great lovely eyes brimming over with tears, while she pressed to his side, and twined her arms round one of his. 'All will be right, King. But for hating, I cannot hate thee, dear, being constant to my kinsfolk and my friends. Yet I will not press thee to confide in me. Take comfort. These be dark days for us all, King; brighter will come yet.'

'Thou'rt an angel-comforter, Deb.' Kingston had regained some calmness, and resumed his walk, holding Deb's hand upon his arm. 'But of all human infirmities, ye would hate weakness most. Isn't it so?'

'Weakness? Well, yes. I like not weak men. You are not weak, King?'

He laughed aloud and bitterly. 'Weak as water! Ah, ye will know it some day, perchance!'

'Mistress Blancheflower does not think ye weak, I'll warrant.'

He laughed again. 'Mistress Blancheflower thinks not much about it.'

'(They have quarrelled, thought Deborah, 'and this makes him so reckless and unhappy. Well-a-day! I cannot interfere.') 'So it seems to you,' she answered aloud; 'but maids can be very proud, I tell ye; but because she does not shew her thoughts, you must not love her less.'

'Ah, this is sound advice, and easy to be followed! Some maids have no thoughts at all.'

'You would never have loved such, dear King! Nay, you are hard and bitter, and that makes you unjust.'

'Have I been so? Not one word have I uttered against Mistress Blancheflower. I am fond enough of Mistress Blancheflower, Deb.'

So they said no more, and Kingston Fleming received neither rose nor kiss. He did not sleep that night, he could not, for his 'trouble.' He stepped out on the leads to smoke, and saw all Enderby lying still and peaceful in the pale glory of the moon. He stood thinking, thinking. There is her lighted window in the turret. His whole

soul ached and yearned. Why, O unhappy Kingston? He said not to his soul then: 'Deb, thou'rt too mad for me!' King Fleming, you are betrothed; you are about to wed a beautiful and 'honourable' lady; fly from all thoughts that would wrong her and your own honour; shut your eyes and steel your heart against the dangerous charm of Deborah Fleming; fly from Enderby! Deborah, are you witch or siren? With what subtle glamour are those eyes charged, that they haunt the captive soul, and will not let it be? Is it coldness, indifference, disdain, a sisterly tenderness—she gives him each in turn—that is maddening him so? Why was she so beautiful? Why should the sun-tanned romp of two years ago turn to so perfect and delicate a beauty? Deborah has bewitched her cousin Kingston, and for that he knows not if he loves or hates her most, as he upbraids her bitterly. Yet, has she tried to lure him on? Has she not rather rebuffed him? No; it is the very essence of coquetry to woo and fly. He will allow her no grace, but that she is a 'graceless Fleming flirt.' And then he pictures her an angel in all but wings and crown. Anon the room is dark, the light is gone, the moon is clouded over, and Deborah Fleming lies sleeping—the noble, the beautiful, the guardian of a wild old father—the sweet adviser of a reckless brother—the angel and the Rose of Enderby—the lover of honour, purity, and good faith. Too late! too late! The bright and noble soul had been unsought, uncared for in its immaturity, darkened as it was in early days, and obscured by childish shames and sudden passions; but that fatal gift of beauty roused him now to a sense of all that he had lost. Beauty had ever been Kingston Fleming's lure. Then it was only her beauty that he loved? Again he voted her fiercely a universal and wild coquette. Well, she was fair game then. Indifference, and then and again a swift glance or tender sigh, should win her yet. No matter if the rose faded, if it could be no rose to him. Then, then he would wed the lovely and uncertain Beatrix Blancheflower. Still he lingered. 'Deborah! Deborah!' In all Enderby there is no light; and no light in Kingston's soul.

CHAPTER THE TENTH.

It was late in the morning before they met. Deborah was all sunshine and gaiety. Woman-like, she lived in the present, and realised no Enderby and no future without Kingston Fleming; the interchange of words and looks was enough for her. He turned his face aside, that she might not see how haggard it was, and was angry with her for her happiness.

Adam Sinclair came that day to Enderby, and Deborah played a dangerous part, but with infinite spirit, grace, and charm, so that it set the young man and the old man hating one another, as men can hate in jealousy. But Master Sinclair was the favoured one, and saw it. What was Master Fleming but a kinsman and a brother? So Master Sinclair rode off more madly possessed than ever, and daskly revolving plans; for Mistress Fleming he would wed, by fair means or by foul.

But the youthful beauty was not pleased. Kingston had seemed tenderer the day before; his eyes had looked admiration of her beauty; he had watched her, and given her his troubled confidence

and affection. She loved him better then. Ah, he was content. He had heard from Mistress Blancheflower! and he cared not if she, Deborah, encouraged and even wedded old Adam Sinclair. So the rapid thoughts fled through Deborah's mind. No; she would not be treacherous to Mistress Blancheflower, she would not; but she could not bear this coldness! He was leaning from the window, and watching Mrs Dinnage, who sat below at her work in the sunny courtyard, while her sworn friend and foe, Dame Marjory, fed the pigeons. Deborah went and leaned beside the window.

'Wilt ride, King? We may not have steeds to offer long.'

'Nay; I will have none of your rides. I prefer watching Mistress Dinnage. She is pretty. All girls are pretty.'

'Ye are not gracious, Master Fleming. See if I ask ye again! Now there is one, Master Adam Sinclair, Lord of Lincoln, would ride to the world's end for me.'

'He can ask for favours in return; one day ye will pay him dearly.'

'How so, bird of ill omen?'

'With yourself.'

'Master Kingston Fleming, I do not need your auguries; once before I told you so.'

He looked up and flashed a smile—most mocking, or most tender?

She leaned from the window at his side. 'You are happier to-day, King: you can taunt.'

'O ay, I can always do that.—How pretty is Mistress Dinnage!'

'I am glad she pleases you.'

'Give me a rose, Deb, for peace.'

She gave him one. 'Throw it not to Mistress Dinnage now; she would only scorn your offering.'

Kingston touched the flower with his lips. Deborah blushed.

'If I may not kiss the Rose par excellence,' said he, 'I will kiss "the Rose's" rose.'

'Ye talk nonsense. Poetry does not suit you, King.'

'Ah, I have never written you verses.'

'I have not inspired you, mayhap.'

'Ye are too cold, Deb, save when Adam Sinclair is by. Once ye were all fire and fret; now ye are all snow and sorcery.'

'Strange blending! Have I witched you then?'

'Ay, the first day I came.'

'What worth is witchery?'

'To wear the heart away.'

'A pleasant vocation, truly, if I am working the like on you! But I thought not I was of so much dignity, in your eyes as either to wear your heart or pleasure it.'

He looked in her eyes then as if his whole soul were in his own. 'Deb, art speaking truth?'

'Ay,' she answered with earnestness; 'as surely as that my name is Deborah.'

'None so blind as those who will not see.' Well, well, Lady Deb, think as ye will. Are you a coquette, Deb? I was wondering last night.'

'Oh, you do think o' me then? Well, I know not. If I lived in the great world, I might be; here, what can I do?'

'Enow; it seemeth me. It is well for ye, Deb, ye're not in the world; ye'd be a wild one! You're too beautiful by half.'

Deborah blushed, and with what covert joy Master King Fleming noted it!

'After that fine compliment,' said she, 'I will leave you to the contemplation of Mistress Dinnage. All girls are fair to you. I am going to ride. I may meet my wandering Charlie.'

'You will not ride alone?'

'Ay ; not even Jordan with me. I may ride to Lincoln Castle.'

Kingston rose. 'Ye shall not have the chance. I am your cavalier, Deb.'

'As it please ye!' And away went Deborah, singing.

A SUMMER HOLIDAY IN NORWAY.

A SUMMER holiday in Norway can scarcely be otherwise than delightful. This beautiful northern land has attractions for all classes of tourists. In few other regions in Europe can there be found commingled such picturesque firths, such clusters of rocky islets, such lofty mountains, such exuberant sunshine, and such a bright ever-changing sea. Interesting to all, it is peculiarly attractive to the lovers of Isaac Walton's gentle art. To the angler, a Norwegian lake or river has long been an aquatic Paradise. What a blissful experience it must be to hook a twenty-pound salmon, or even a five-pound grilse ; to feel it rush like an arrow through the pellucid flood, and to dash away after it through a cool forest of sedges, or over a subaqueous Stonehenge, with the pleasant hum of the line as it spins out into the river, resounding in your ears. While high overhead the lark sings in the clear air, and the silvery mists creep up the steep hill-sides, and the golden sunlight streams down through the thickets of birch and alder, dancing on the ripples of the gladsome river, and shining right down into the angler's gladsome heart. This is an experience worth all the elixirs that were ever invented. It braces the nerves, it expands the lungs with full draughts of the healthful mountain breeze, and makes the sinking heart bound once more elastic with the buoyant unforgotten lightness of boyhood.

Mr Arnold, in his *Summer Holiday in Scandinavia*, has done ample justice to the great and varied natural charms of Norway. Unhappily for some travellers at least, it cannot be approached without a longer or shorter sea-voyage, the pleasure or discomfort of which depends very much upon the weather. Our author in this respect was not very fortunate, for the sun kept resolutely out of sight. The sky, the dim haze-covered land, and the surrounding waves, were all one dull uniform gray ; but even with this drawback, he was struck by the rugged grandeur and beauty of the sea-wall of Norway, one of the noblest in the world. Frowning, it rises a rocky rampart of gray beetling crags, fantastic buttresses, and cliffs of limestone, embosomed in masses of delicate many-toned hues of verdure, as the silvery gray green of the birch, the brighter shade of the hazel, or the more sombre colouring of the pine, predominates in the foliage of the cope-wood, with which every available nook and cranny is crowned. Jagged peaks and serrated promontories fashion themselves in the most picturesque fashion out of the gray limestone crags, sheltering lonely sequestered bays of wondrous beauty ; while beyond rise long ridges

of lofty hills, their brown sides covered in great part with odiferous pine-forests, checkered with vivid green patches of corn-land and pasture ; with here and there a cluster of little quaint wooden red-tiled houses, lending to the beautiful wild scenery the interest of human life and industry.

At Christiania Mr Arnold and his party landed amid a group of placid onlookers ; and having, chiefly by their own efforts conveyed their luggage to the custom-house, found that dreaded ordeal to be in Norway mere child's play. 'An old official,' says our author, 'with a flat cap, looking remarkably like a Greenwich pensioner, patted some of the luggage, and said in good but brief English : "Tourists?" "Yes," replied our spokesman. The old official then bowed, intimating obligingly that Norway was glad to see us, and waved his hand for the next lot.' A month was the time that the party had to spend in Norway ; and after mature consideration, they decided that the best route for them would be from 'Christiania by Lake Miosen to Gjøvik and the Fille Fjeld *vid* Fagermoen, and so to Bergen by Lærdalsøren, returning by the southern road and Lake Krøderen.' What they could not determine was, whether to walk or ride or drive ; but at last they decided that it was best to do at Rome as the Romans do, and wisely fell back upon the native carriages.

As these are quite an institution in Norway, they merit a few words of description. Imagine a low light wooden conveyance, somewhat spoon-shaped, with an upright splash-board in front, two very large wheels, and a big apron buttoned down on both sides around the traveller. A sensible conscientious cream-coloured pony is attached to it in front ; and behind, perched on a shaky projecting board, is a fair-haired, sallow, phlegmatic-looking peasant, boy or man as may be, who is called a *skyds-carl*. You may drive yourself, if you choose ; and if you do, you may possibly flatter yourself that you are lord, if not of all you survey, yet still of the cream-coloured pony in front of you, and may make the pace according to your liking. Never was a greater mistake ; the *skyds-carl* perched behind is that pony's master, not you ; and if he chooses to utter in a low tone *hur-r-r-r-d*, you may dog until you are weary ; neither whipping nor coaxing will make the sagacious creature quicken its pace an iota. The *stol-bjerre* or country cart is a square wooden tray with large wheels, and a low-backed seat across the centre, sometimes with and sometimes without springs. The posting stations are more or less picturesque as regards scenery, but are all built upon one plan, of red pine logs, around a spacious yard, which may be tidy or untidy according to the taste of the innkeeper. Barns or other outhouses form two sides of the square, the house makes the third, and the fourth is supplied by the road. The buildings are roofed very generally with sods of turf, forming a plateau on which long grass and wild-flowers were luxuriantly. The food to be procured at these stations is good of its kind ; salmon, trout, reindeer venison, mutton ; and wild-ducks in abundance if the tourist can shoot them—all very tolerably cooked. By way of dessert, there are wild raspberries, strawberries, and molleberries, a yellow insipid fruit of a pale amber colour, which tastes like a rain-soaked raspberry. The only treat to be procured at the up-country stations is *flad-*

brød, to whose qualities Mr Arnold bears the following affecting testimony: 'It is thin, dry, dusty, full of little bits of straw, and quite tasteless, like the bottom of a hat-box with the paper torn off.'

The household arrangements of these posting establishments are often very primitive. The front door sometimes opens into the sleeping-room of the entire family; and if you arrive any time after nine P.M. you may see on entering the master and mistress of the mansion reposing on a broad high shelf at one end of the room near the stove, while the rest of the family and guests of lowly degree recline around on benches, or on the floor, where they can at least have what room they require. This is a luxury which no tall tourist need expect in a Norwegian guest-chamber; there the beds, although furnished with appliances for making them as wide, if need be, as the famous bed of Ware, are seldom longer than five feet eleven.

The roads, although necessarily steep at places, are fairly good; but most of the bridges are constructed in a very primitive style. The natives are a kind, hospitable, honest, but somewhat apathetic race. Watching their stolid expressionless faces, one cannot help wondering where the superabundant energy of the old vikings has betaken itself to. During the long winter evenings, the women knit and spin a great deal. They provide themselves plentifully with household linen and homespun clothes, which are often of a dark-brown colour, enlivened in the case of the men by a bright scarlet cap, and in that of the women by a white kerchief tied under the chin. In appearance, a small Norwegian farmer is very like an English labourer. His house, built of wood and thatched with sods, is devoid of ornament, but has no lack of solid comfort, and is sufficiently warmed by a huge quaint-looking iron stove.

The women on holiday occasions turn out in the old Norse costume, the chief feature of which is the bodice, which is often made of some bright-coloured velvet, turned down in front with white silk, and laced before and behind, according to our author, 'with several yards of fine silver chain, each chain ending in a silver bodkin, in order that they may be the better threaded through double rows of eyes (in themselves strikingly pretty articles of silver), that run in four lines up the back and front of this showy piece of Scandinavian haberdashery.' Both men and women are very fond of large bright buttons and of silver or plated ornaments.

Bears abound in the dense forests of Norway and on the high barren uplands; and thrilling stories are told of hair-breadth escapes from these fierce but sagacious animals. A sportsman near Maristuen was one day wandering in a birch thicket, when he suddenly came upon a huge bear regaling itself with raspberries. Bruin was peaceably inclined, and fled; but he instantly gave chase. With a speed perfectly surprising in such a lumbering unwieldy animal, it ran down the hill-side, while he rushed after it in hot pursuit, till on a steep slope of the mountain it suddenly disappeared. There was a little patch of brushwood before him, over which he leaped, and hearing an ominous crashing of branches in his rear, turned round, when there was the bear, which with a murderous growl rushed right upon

him. Instinctively he raised his rifle and drew the trigger just in time, for almost at the same moment the infuriated brute seized the muzzle of the piece, which exploding, blew its head to atoms.

A Norse wedding is always preceded by a series of presents from the bridegroom to the bride. First, there are about two dozen meal-tubs of various sizes, elaborately painted; and last and crowning glory of the *broussant*, there is a wonderful clothes-press. Inside, as far as regards drawers large and small, and brass pegs and racks for crockery, it is a marvel of ingenuity; while outside it is a perfect triumph of art. The ground tint is a warm bright vermillion, painted all over with green and yellow scrolls, enlivened with wreaths of gorgeous flowers, and piles of brilliantly hued fruit, pleasingly interspersed with quaint lovers' knots and bleeding hearts transfixed upon Cupid's darts, in the midst of which are the names and birth-dates of the liberal donor and blissful recipient of this magnificent wedding-gift. A Norwegian maiden, who is generally as sober as a linnet in her ordinary attire, appears on her bridal day glittering in all the colours of the rainbow. On her long fair hair is set an antique crown of silver gilt; and her bodice, stiff as a cuirass, is thickly studded with beads, silver-gilt brooches, and small mirrors. This bridal adornment is too valuable to be the individual property of any Norse belle, but belongs to the district, and is hired out for the day.

The scenery in Norway is remarkably beautiful; the mountain roads often wind along the base of huge gray cliffs with steep dells beneath, where some bright salmon river may be seen sparkling along beneath the gloom of the overhanging pine-trees, or some soft blue lake may be discerned glimmering like a sheet of silver in the sunshine, or pillowing on the stillness of its waveless breast the mighty shadows of the everlasting hills.

At Strande Fjord, one of these lovely lakes, which was shut in by a dark background of pine-clad mountains, whose rugged sides were furrowed with deep torrents and white lines of waterfalls, our travellers found in the pleasant station-house a party of seven English ladies and gentlemen, tempted, like themselves, to make a halt of a few days at this charming spot. Here there was every variety of scenery—lofty mountains, precipitous waterfalls, dense pine forests, and wide undulating stretches of fresh green meadow-land; while in the midst slept the tranquil lake; now kissing with tiny wavelets the pebbles on its silvery shore, now bending away round the bold red cliffs, that guard like weird sentinels this lake Paradise of the North. The face of the huge crags is frayed and worn into deep shadowy caves, whose roofs are tapestried with a profusion of ferns; while by the precipitous margin of the lake, long verdant palm-like fronds wave in the breeze, or stoop to meet sub-aquatic forests of weeds and water-lilies.

Løralsoren, the highest point which they reached, was a quaint overgrown village, nestling between high green and purple hills. Insignificant as they accounted it, it was a town of no small repute in the surrounding wilderness, for it possessed a doctor, a church, two hotels, and a telegraphic office. Still, in spite of all these advantages, it was an undeniably dismal little

place, intensely cold, and with nothing to offer by way of comfort for the inner man, except salmon, a viand of which, when confined to it exclusively, people tire sooner than of any other.

Wide ranges of mountains extend all around Lördalsören, towering up one above the other in savage grandeur till their jagged snow-clad peaks seem to pierce the sky. Gray and yellow patches of reindeer's moss carpet the sheltered nooks and hollows among the hills, and the deer themselves are abundant: the skyds-carl pointed out a hill where a native sportsman had recently shot nine in one day.

So bitter was the cold, that before they reached Bjoberg, on the downward road, they were half frozen, and could scarcely hold the reins.

From Bjoberg the descent was rapid, and was like the change from Christmas to midsummer; the sun's rays became warmer and warmer, and the breeze more mild, until they exchanged the snow-clad hills, the bleak uplands, and the barren patches of reindeer's moss, for the wild-flowers, the sparkling rivers, and the luxuriant greenness of the northern summer.

At Hufnäs they found excellent entertainment at the house of Madame Brun, a Frenchwoman, whose superior cookery worthily sustained the high gastronomical pretensions of her nation. Near her pretty house they shot two varieties of the woodpecker, and saw tranquilly sailing in mid-air, a few hundred yards from them, a splendid specimen of the Norwegian eagle.

The most abundant bird in Norway is the magpie, which the peasantry, from superstitious motives, seldom or never kill. There are also great quantities of the hooded or gray crow, abundance of swallows and snipes, and great flocks of wild-ducks of five different kinds. Generally, they are excellent eating; but at the Lillie Strand a black duck was shot, a bird of such a singularly unpalatable and fishy *godd*, that our author jestingly supposed it must be a stray member of the species which the Pope benevolently allows good Catholics to partake of on Fridays.

Grouse, ryster, and woodcock are also found. Grouse one would fancy must be abundant, judging from the experience of an Englishman who is reported to have killed twenty-two brace in one day.

Lake Kröderen they found a pretty placid sheet of water; but after the surpassingly grand and beautiful scenery through which they had passed, it seemed to them tame; and as it was impossible to obtain any refreshment on board the steamboat which plied on its waters, they made no unnecessary delay, but pressed on as quickly as they could to Christiania, whence they repaired, *via* Jönköping and Helsingborg, to Copenhagen.

The Swedish railways they found very slow, and the country flat and uninteresting, except around Lake Wenern, which was beautiful, and had besides all the interest associated with the birth-place of Linnæus. They passed the little village in which the boyhood of the great botanist was spent, and called to mind that as a child he could not recollect names; and was voted, even at the university of Lund, a most superlative dunce, who could not be made to display much interest in anything except the pursuits of his father and uncle, who were ardent botanists. So poor was the household of this illustrious Swede, that his

father could only allow him eight pounds a year for his whole collegiate course; and the poor student while at Upsal had often to mend his shoes with gray paper, and sally forth rod in hand to eke out his slender meals with a few fish from the lake. The country between Elsinore and Copenhagen impressed them favourably; it is, our author says, 'dense with beech and fir woods, and full of glades, lakes, and park-like lawns.'

Copenhagen is a handsome town, with a population singularly English-looking in manners and appearance. Its great point of attraction for our tourists was the Museum, filled with the works of Thorwaldsen, the Phidias of the North. Here, in the middle of a large hall, a cenotaph is erected to the memory of the great sculptor; and around stand the imperishable monuments of his genius, instinct with the classic grace, with the refined delicacy, with the glorious beauty of old Greek art, carried to as great perfection beneath these cold skies of the gray North as ever it was in sunny Athens.

From Copenhagen our tourists returned by Jutland and the Hamburg railway to Calais; having enjoyed their holiday so much, that Mr Arnold recommends 'all the lovers of nature to see Norway as well as Seville before they die.'

THE ADMIRAL'S SECOND WIFE.

CHAPTER I.—SURMISES.

A DREARY evening, rain and sleet chasing each other alternately, and making the streets of the busy town of Seabright dismal as streets can well be. Yet there must be some fascination in the outdoor scene, or Katie Grey would not stand so long peering out of the window into the dim dark night. Presently a carriage comes in sight; splash go the horses' feet into the deep mud; there is a quick rattle of wheels, a sudden glitter of white dresses, scarlet cloaks, and brilliant uniforms through the misty windows, and the vehicle passes rapidly out of sight.

Katie adds up on her fingers: 'That makes the tenth carriage. Everybody is invited except us. Why—why have we been left out?'

Miss Grey is standing alone in a darkened room. She has turned down the gas, that she may see without being seen, and she remains hidden in the shade of the deep crimson curtains. There is a party at Government House this evening. News has reached her of numerous invitations that have been issued, and she is mystified and perplexed that neither note nor card nor message has found its way to her house. Hitherto Katie has been a favoured guest at the Admiral's. No festive occasion has seemed complete without her presence. She has sung to Sir Herbert Dillworth, played for him, talked to him; and he has stood entranced beside the piano, whispering thanks, that she has interpreted at their full value. 'What can have changed him now?' She has asked herself that question over and over again; but so far no answer has come to her restless surmises. Presently a hack cab comes in sight; and instead of driving past the window,

it stops suddenly at her door, deposits its burden, and goes on its way. Katie distinguishes a flash of gold-lace and hears the rattle of a sword on the door-steps. Wondering much who can have come to the wrong house, she starts when a servant throws open the door and announces 'Captain Reeves.'

Katie comes out from the crimson curtains in much confusion, vexed at the bare possibility of being suspected of spying at guests more favoured than herself. With a flushed cheek she turns on the gas and quickly goes forward to greet her visitor. Captain Reeves is a tall man, with dark hair, keen dark eyes, and with an unmistakable air of being on perfectly good terms with himself. He wears full naval uniform, and has ribbons and clasps on his breast. His first look at Katie is one of amazement, for he sees she is in her usual home costume, and is not dressed for the party at Government House.

'What! not ready, Miss Gray!' he exclaims quickly.

'Ready for what?' inquires the young lady with transparent dissimulation. Whatever her private disfigurement may be, she has no intention of proclaiming it to all the world—least of all to Walter Reeves.

'We shall be late. Your mamma offered me a seat in your carriage; so I have taken her at her word, and am come to join your party.'

'We are not going to the Admiral's to-night.'

'Not going! Is anybody ill?' He starts back a step, as though the news is incredible; and Katie laughs merrily.

'We are all quite well, thank you; but we don't consider ourselves bound to attend every party. You don't grudge us a quiet evening at home sometimes, do you?'

'O no, certainly not; but I'm sorry your taste for retirement asserts itself to-night. I'm horridly disappointed; and if there's anything in the world I hate, it's these semi-official, stuck-up assemblies. I'd far rather stay here and have a chat with your father.'

Walter Reeves has seated himself by this time, and is watching Katie, as she plucks off a geranium leaf from a stand near her and crushes it between her fingers.

'You'll be sure to enjoy yourself when you get there.'

'I'm very sure I *shan't*. You're the only one I cared to meet! I can tell you the Admiral expects you all.'

'How can you possibly know that?'

'Because he said so. I went to his office this morning about some question of duty, and he suggested I could talk it over this evening with your father, for you were all going to Government House.'

A quick blush rises to Katie's cheeks, giving a wonderful brilliancy to her complexion; just the warmth and tinge needed to make her beauty perfect. She stoops down, apparently to look

more closely at the geranium leaf, in reality to hide the glow of triumph that flashes from her eyes, as her rapid thoughts sum up the case. 'So Sir Herbert is not to blame after all. He expects me to-night. Who then can have thrown this slight on our household?—I know! I know! Blind that I was, not to suspect it before! Mrs Best, the Admiral's daughter, has done it. She is afraid and jealous of me!' The geranium leaf falls to the floor, but Katie does not notice it, nor does she see that Walter is smoothing it out, to the evident damage of his pure white kid gloves. He is furtively gazing at Katie in a half-vexed, half-admiring manner; thinking how well she looks in that dusky, shadowy, black dress, with that band of crimson velvet in her hair. Not one of the girls at the Government House party, with all their splendour and show and glitter, will match her. He has never seen her equal, except perhaps in the orange groves and sunny gardens at Valparaiso. There he has sometimes met with beautiful women, graceful hours, resolute with beauty and light, tinged and ripened with the glow of that fervid climate.

'You will be dreadfully late at the party. Why do you waste your time here?'

'I am *not* wasting my time; and even if I were, I deserve some amends for being offered the corner of a carriage, and then being thrust out in the cold. I don't care in the least about going,' he exclaims in an aggrieved tone.

Katie laughs, with a gay mocking ring in her voice. 'Oh, you will change your opinion by-and-by, when Mrs Best is singing one of her duets with you.'

'I hate Mrs Best's singing! That tiny pipe of a voice of hers, that she calls "soprano," is nothing to boast of after all. I don't mean to sing a note to-night.'

'Oh, how cruel of you. What will people do? But you will not be able to resist, when Mrs Best begins to persuade you and purr at you. Do you know what she always reminds me of?'

'How can I tell what your fertile imagination may portray?'

'She reminds me of a beautiful Persian cat my grandmother once had—a rare, soft, splendid-looking creature, with lovely white fur, innocent mild eyes, and with blue ribbons round its neck. You would never dream of its cruel claws, till you saw the bleeding scratches on your hand.'

Captain Reeves looks puzzled. 'I don't see the resemblance.'

'No, no; you don't understand my nonsense; so please don't notice it. And now, as you don't seem in the slightest hurry to go to Government House, we won't stay in this cold room any longer. Come up to the drawing-room; they will all be glad to see you.'

'Thanks; no. I must be off now; but remember! the next time I accept a corner in your carriage, I shall make sure you are going, before I dismiss my cab. Good-night.'

CHAPTER II.—A QUIET EVENING AT HOME.

With a smile still lingering on her lips, Katie hears the door close after Walter Reeves; then she goes up-stairs to join the rest of her household. A calm family scene meets her view as she throws open the drawing-room door. The room is not a large one; but what it wants in size is amply atoned for by the exquisite taste with which everything is arranged and grouped. A few strokes of the pen might describe the well-chosen accessories of curtains, sofas, and carpet; but it would take artistic skill to portray the many touches of prettiness and beauty to be found there.

The few paintings that hang on the walls are marvels of delicate colouring and completeness of design; the ornaments of various kinds about the room are most of them due to feminine cleverness; screens, cushions, chair-covers, all show that busy graceful fingers have been at work; but they were not Katie's fingers—not the outcome of Katie's industry. She has a perfect abhorrence of fancy-work; rarely is she to be found sitting down like other girls to puzzle her head with intricacies of knitting, lace-making, or embroidering. Her plea is: 'I haven't patience for that sort of thing, nor have I taste or time for it. Here Nellie, my dear, you puzzle out this pattern; and while you are doing it, I'll play any amount of pieces you like—Beethoven's, Mozart's, Mendelssohn's, or Schubert's, which you choose.'

So patient Nellie of the artistic mind and home-loving tastes would pick up her sister's discarded work, and skillfully mould it into wondrous results of aptitude and dexterity.

Nellie is sitting at the table on this evening, bending over a volume of travels. She who rarely leaves the house herself, yet likes to read of scenes of wild adventure and foreign travel, with all their detail of fervid luxuriance and gorgeous scenery. Her delight is in tales of peril and bravery. A piece of bright-coloured embroidery lies beside her. She is evidently reading and working by turns.

At first glance of Katie's youngest sister, one is struck by her sweet countenance and delicately moulded face, the calm blue eyes and thoughtful look. But at the next glance, one sees that her figure is hopelessly deformed. Some blight has fallen on her in early childhood, and closed to her for ever the active pursuits and enjoyments of life. But Nellie is happy and contented in her placid way; she has resources and pleasures of which Katie has never even time to think. The school of weakness and suffering has taught her many a salutary, many a holy lesson. At the further end of the room sits Mr Grey, the master of the household, a thin, wiry, irritable, high-principled man, with white hair and close-cropped white head—a man who thinks himself a very martinet in his strict ideas of discipline on board ship; but who is a fume enough, easily ruled ruler in his own house on shore. He flatters himself he is very firm with Katie, yet she manages to have her way in most things. Mr Grey, with a small table before him, is engaged with navy statistics, making calculations that will open the eyes of the Admiralty some of these days, he thinks.

His wife is the only other member of the family party, and she is a soft, pillowy, amiable, motherly woman, with no very demonstrative ideas of her

own, but rather ever proving herself a mild reflector of the thoughts and wishes of the various stronger minds of her family.

It is on this placid scene that Katie dashes like a brilliant meteor. Somehow, she never can do anything quietly. She is never the one to steal into a corner and settle herself down there, lest she should disturb any other person; rather she makes the constant sense of her presence felt; there is always something in her movements that draws attention to her and centres it there. Thus, when she opens the door, they all gaze up at her. Mrs Grey, who has been dozing off now and then into calm forgetfulness, picks up her knitting and looks at her daughter with a sigh. The sigh is one of sympathy, for she knows the depth of the mortification under which her daughter has been labouring, and does not know the panacea has come. She does not know Katie has armed herself for combat, and is quite prepared for a tilt with Mrs Best when the opportunity arrives. No red-skinned Indian with war-paint and tomahawk is more ready for action with a rival chief, than Katie is to assert her power over the Admiral's daughter. True, her weapons are only woman's witchery; true, the disputed prize is only a warrior's heart; yet the strife promises to be difficult, perhaps prolonged. In other words, Miss Grey has said to herself: 'If Sir Herbert makes me an offer, I will marry him; and then Laura Best will discover that even her influence does not equal mine.'

'Where have you been all this time, Katie?' asks Mrs Grey in a plaintive tone.

Down in the dining-room.

'What! in that cold room, alone? You should not mope so, my dear. You should come up here with us, and be cheerful.'

Katie gives one of her ringing laughs as she replies: 'Oh, I have not been moping, mother; neither have I been alone. Walter Reeves called in; and do you know you have half offended him, for you asked him to go with us to Government House.'

'So I did, sure enough. I said we should have a carriage from Robyn's livery-stables as usual, and that there would be plenty of room for him. I little thought *then*, we should not even have an invitation. Was Walter very angry?'

'I daresay he has got over it by this time, and is sunning himself in Mrs Best's smiles. Do you know, mother, I have found out it was Laura who would not invite us to the party? It was not the Admiral's fault after all.'

'I can't see that makes any difference, Katie: the fact remains the same.'

'But it *does* make a difference—a very great one to me; and I'm so glad I've found out the truth at last.'

Katie sees her sister looking up over her book at her with grave reproach in her blue eyes. If Mrs Grey is too obtuse to understand, Nellie is not so blind, and she has a sudden revelation of what it all means. She knows the sublime selfishness of her sister, her ambition, her love of retaliation; and the unspoken reproof makes Katie turn suddenly away and seat herself at the piano. A feeling of defiance actuates the girl at the moment; and she begins at once to sing one of Sir Herbert's favourite songs, one he has often asked for, a stirring vigorous melody, that goes straight to the heart, and wakens up whatever is brave and

martial in one's nature. Mr Grey closes his books at once; he knows he cannot reckon up decimal fractions while the room is flooded with music and melody, for Katie's rich voice and brilliant accompaniments arrest attention at once. Mrs Grey listens also, and dozes between whiles, thoroughly enjoying her evening at home. Though she would have shaken off her drowsiness, and dressed herself in one of her rich brocaded silks or lustrous moires, and would have accompanied Katie to the scene of action, had she been an invited guest at the Admiral's to-night. Willingly would she have gone through any amount of inconvenience, rather than this handsome daughter of hers should fail of proper escort, or infringe any of the 'thousand-and-one' rules of etiquette.

CHAPTER III.—AT GOVERNMENT HOUSE.

Captain Reeves is in no placid frame of mind as he goes on his way to the Admirals. He passes through the grim strong gates at the entrance, near which a sentry is solemnly pacing to and fro. He walks down the long pathway, on each side of which huge tubs of aloes hold out their dark sharp-pointed leaves, and then he goes up the broad brightly lighted stairs. The rooms are already full of people; a confused well-bred murmur of conversation rises from the throng of guests in mingled subdued tones. Sir Herbert is standing inside the larger drawing-room, talking with a group of officers; but he leaves them the moment he catches a glimpse of Walter at the door. He even goes to meet him with a smile of welcome on his lip, looking all the while over his shoulder, as though he expected to see other guests coming with him.

'You are late, Captain Reeves. But where is the rest of your party? Did you not say you were coming with the Greys?'

'The Greys won't be here, Sir Herbert. I called there, but find none of them are going out this evening.'

'Is any one ill?'

'O no; Miss Grey tells me illness is not the cause of their non-appearance. She did not give any reason for their sudden fit of seclusion.'

'Very strange!' murmurs the Admiral; and he saunters away to another part of the room, where other guests speedily claim his attention. A curious observer though, might observe a shadow of disappointment has come over his face, also that he is unusually grave and thoughtful during the rest of the evening.

Sir Herbert is by no means an old man, as some reckon age. He has a grave refined face, keen penetrating eyes, dark hair beginning to grow a little thin on the temples. He wears uniform, and a star that gleams forth upon his breast tells that he has done good service for his country. His composed dignified bearing might well bear comparison with many far younger men in that brilliant assembly. His smile is sweet, and lights up his rather serious face like sunlight; but the Admiral is generally grave; his thoughts are earnest, his life is earnest, and he is not by any means easily moved to mirth.

Walter Reeves, as in duty bound, makes his way towards the lady who at the present holds sway in her father's house. But it is no easy matter to reach her, for the crowd is considerable.

Men are lounging about, dressed apparently in every kind of uniform under the sun. The dark-blue of the navy of course predominates, but the marines and several line-regiments are amply represented. Swords, epaulets, and stars glitter and sparkle from every part of the spacious well-lighted rooms.

Elegantly dressed ladies add to the goody show; and their many-hued robes mingling among the varied uniforms, add brilliant colouring to the scene. Here and there, a few black coats are visible, but civilians are rare on this evening. Walter Reeves, who is fond of pleasant effects, notes all this in his half-careless half-indolent way, as he slowly makes his passage through the throng and advances to the inner room. Mrs Best is seated on a low sofa, looking like a queen in her court, for many and admiring are her courtiers. Red coats and blue coats jostle each other, in the anxiety of the wearers to get speech with the lady of the house. Very pretty and graceful she looks as she sits there, dividing her favours with impartial hand. She has a fair blooming face, bright eyes, and a girlish lively manner. Her dress is of snowy crape, that falls round her like a fleecy cumulous cloud; the pale lavender trimmings that peep forth here and there in fringe and ribbon, are the last faint remains of mourning dedicated to her late husband. To catch the sparkle in her laughing blue eyes, to note her almost flaxen hair and eyebrows, to mark the rounded grace of her youthful figure, one would hardly imagine her to be a mother and a widow. Yet such is the case: she has two visible responsibilities at home in the shape of two little sons, who are at that moment, it is to be hoped, soundly slumbering in their far-away nursery down at Hayes Hill. Laura Best looks like some sunny-hearted merry girl just out of her teens, so innocent and guileless is her countenance, so silvery are her pearls of musical laughter. Her sofa is placed in a kind of alcove slightly away from the full glare of the light; on each side fall the soft folds of white lace curtains, for the sofa is placed between two bow-windows. Behind it is a high stand of beautiful plants; many coloured hoyas display their clusters of waxy flowers; delicate white azaleas and rose-tinted and crimson camellias mingle their blooms, and hold their proud heads above their glossy foliage.

Mrs Best smiles to herself as she sees Walter Reeves advancing. A suspicion had been haunting her that as the Greys were not coming, for reasons she knows well, he would frame some apology and decline to put in an appearance. So she holds out her hand to him, playfully chides him for being late, and speedily draws him into conversation—that flows naturally and brilliantly wherever Laura Best chooses to make herself a centre. By-and-by Walter finds himself by that lady's side in the music-room; a small place, draped with rose-coloured curtains and lit with soft wax-candles, and just holding a piano, a harp, and a limited number of performers and listeners. As he takes part in a trio with Mrs Best and Major Dillon, and watches Laura's white dimpled hands running over the ivory notes of the piano, bringing out sweet sounds in her own light rippling manner, he remembers Katie's words about 'hidden claws,' and smiles as he recollects how severe and satirical Miss Grey can sometimes be.

He remains in the music-room all the rest of the evening, and does not seek to join the various groups of men, who are either talking politics or discoursing naval matters. And when at last the evening comes to an end and he goes out of the gates again, he confesses to himself that the time has passed pleasantly and rapidly enough, even though Katie Grey was absent.

TRICKS IN THE WINE TRADE.

AMONGST articles of daily consumption in this and other countries, perhaps none is more adulterated than wine; and although the attention of the public has been from time to time directed to the evil, the evil seems to continue unabated.

Hamburg has long enjoyed a notoriety for the manufacture of sherry—a merely fictitious article, in which no real sherry has any existence, but which, imported to England, passes muster as genuine wine. Latterly, to the discredit of France, false wines have been largely fabricated and vended in that country; for it is as easy, if not easier, to imitate French wines as the wines of Spain or Portugal. It is well known to persons in France, that Nancy, the ancient capital of Lorraine, bears a bad name as having been the first to set the evil example of a systematic adulteration of French wines, white and red. Lorraine, Alsace, and Luxembourg are notoriously the seat of a very extensive manufacture of spurious wines, some of which owe nothing whatever to the vine. Imitations of the most renowned brands of champagne, such as Reims or Clermont, are here concocted from rhubarb-juice and carbonic acid, made cheap and sold dear. Light clarets, strong St Georges, Macon, and the rough red Roussillon, can be turned out to suit all tastes, merely by re-fermenting squeezed grape-husks that have already done duty, in company with the coarse sugar extracted from potatoes. Various colouring matters are added, such as caramel, cochineal, and the more formidable fuchsine, and the highly tinted compound is ready for the market.

Narbonne, nestling amidst her vineyards, is not much behind northern Nancy in audacious falsification of the strong natural wines that form the staple of her trade. It has long been the custom with these south of France wine-growers to press the grapes a second time with the addition of some water, and to brew a light, thin, vinous liquor, which was doled out in rations to the farm-servants, or sold at an exceedingly low rate. It has lately occurred to them that this second-hand commodity, dosed with tartaric acid, thickened with treacle, and artificially coloured, would pass muster with heedless consumers as good ordinaire; and as good ordinaire, or Wine of the Plains, it is accordingly vended. First class and even second-class wines, it is well to bear in mind, are invariably the vintage of some hill-side or mountain slope, but even the low-lying vineyards of a wine-growing country yield a growth which has deservedly a good name with buyers of moderate means. This good name, unfortunately, the land-owners and métrayers of Southern France seem resolved to throw away, in their hurry to be rich.

What most perturbs, not merely the doctors and scientific men of France, but the French government as well, is the deleterious character of the colouring matters employed in palming off mock

or inferior wines on the unwary public. The syndicate of Narbonne have formally complained to the Minister of Agriculture that Portuguese, Italian, and Spanish wines, all coloured by elderberries, enter freely into France. But the growers of the Narbonne district have themselves learned to make liberal use of the elderberry and of other ingredients less innocuous. Fuchsine, which is extracted from coal-tar, and of which immense quantities are employed, is the agent in the worst repute; but it imparts a fine ruby-red, and is therefore in high favour. Fuchsine, which is prepared by adding arsenical acid to aniline, is admitted on all hands to be poisonous, although the authorities have as yet hesitated to take vigorous action with regard to its abuse.

There are other colouring principles less dangerous than fuchsine, but still injurious to health, which are in daily requisition for the manipulation of wines. There is caramel, an extract of mallow; pink althaea; Mexican cochineal; rosaline, derived from tar; colorine, and many a fantastically named essence, sometimes of vegetable, sometimes of mineral, or even animal origin. The ammoniacal cochineal which gives so brilliant a dye to the scarlet cloth of an officer's uniform, is decidedly inappropriate as an adjunct to wine. Each ounce of cochineal, it should be known, represents several thousands of cochineal insects boiled down to a pulp, and was once excessively dear. It is cheaper now; and in the July of last year a single grocer of Narbonne sold ten thousand francs' worth of this scarlet colour to wine-growers of the village of Odelian alone, for the artificial tinting of poor and pale wines.

M. Paul Massot, who in the French Assembly represents the department of the Eastern Pyrenees, has taken the leading part in a sort of crusade for the repression of the new frauds in the wine-manufacture, and has been able to lay before the government a mass of authentic evidence on the subject. It was proved, for instance, by careful analysis that a quart of one especial kind of wine, reddened by elderberry juice, contained no less than half an ounce of alum. It was proved also that the red extract of coal-tar, known as grenate, and formerly flung away as refuse, now commands a high price as an ingredient in the composition of that fuchsine which is now tossed by the hundred-weight into wine-vats.

The best and readiest means of detecting the presence of artificial colouring in wines we owe to the ingenuity of M. Didelot, a chemist in Nancy. A tiny ball of gun-cotton supplies us with the necessary test. Dip it in a glass of the suspected wine, then wash it, and it will resume its whiteness if the wine be pure; if not, it will retain the ruddy colour due to the treacherous fuchsine. The addition of a few drops of ammonia gives us a violet or a greenish line when vegetable matters have been made use of to impart the desired colour.

Other and more elaborate tests on a larger scale have been devised; and with the aid of acids and others of peroxide of manganese, and notably of chloroform, the tricks of the wine-forger have been completely exposed. Even benzine fumes, with fuchsine and its fellows, a red jelly that swims on the surface of the discoloured liquor, and by skillfully conducted processes, a precipitate, varying in colour, can in every instance be obtained. Government and the public have now taken alarm,

and it may be hoped that before long the adulteration, by means of fuchsine at all events, will be effectually checked. It must be remembered that growers and dealers were probably in the first instance quite unaware of the dangerous nature of the convenient drug which gave so tempting an appearance to their stock in trade; but publicity, and the recent seizures of falsified wines which have taken place at Paris, Nancy, and Perpignan, may probably serve to enlighten them upon the subject.

TIT FOR TAT.

So long as men are what they are, those who can hit will give blow for blow, literally or metaphorically as the case may be, and standers-by will delight in the passage-at-arms.

Certainly it is pleasant to hear a sayer of ill-natured things put down by an intended victim of his cynical tongue. 'The great assembly,' as Manningham terms it, must have greatly enjoyed the discomfiture of a certain Lord Paget, who, oblivious of his own mean origin, thought to extol his superiority by asking Sir Thomas White what he thought of the quality of the cloak he wore. 'Truly,' replied the worthy alderman, 'it seems to be a very good cloth; but I remember when I was a young beginner, selling your lordship's father a far better, to make him a gown when he was sergeant to the Lord Mayor; and he was a very honest sergeant.'

Nor did those behind the scenes at a certain theatre fail to appreciate the situation when a prosperous equestrian's daughter observed to a retired actress: 'After all, you were only a circus artist; my father recollects you well,' and the elder lady retorted: 'I daresay he does, my dear; he used to chalk my shoes.'

When Lincoln and Douglas stumped Illinois as rival candidates, the latter in one of his speeches declared he remembered his opponent when he served liquor behind a bar. 'That's so,' said Lincoln; 'but the judge has forgotten to mention that while I was serving the liquor on one side of the bar, he was drinking it on the other.' A mild bit of retaliation compared with that inflicted by Brougham upon his fellow-actor Barton. In reply to the first-named asking if he had read the last number of the *Lantern*, a comic paper in which Brougham was personally interested, Burton said he never read the thing unless he was tipsy; a compliment his questioner acknowledged with a bow and, 'Then, Mr Burton, I am sure of one constant reader!'

It is well not to shew contempt for a book to its author's face, as newly made Sergeant Murphy learned when dining in company with the author of *Ten Thousand a Year*. He called out across the table: 'Warren, I never had patience to finish that book of yours; tell me what was the end of Gammon?' 'Oh,' said Warren to the lawyer, 'they made him a sergeant, and he was never heard of after.'

Charles Dickens turning over the leaves of a literary lady's album, came upon a page bearing the autographs of Daniel O'Connell and Joseph

Bonaparte, and over against them read, in Southey's handwriting:

Birds of a feather flock together;
But side the opposite page;
And thence you may gather,
I'm not of a feather
With some of the birds in this cage.

Underneath the Laureate's lines the novelist wrote:

Now if I don't make
The completest mistake
That ever put man in a rage,
This bird of two weathers
Has moulted his feathers,
And left them in some other cage—

a reflection upon the poet's political inconstancy, that called forth a *quid pro quo* from one of Southey's admirers, who thought a man had as much right to change his opinions as to alter his style:

Put his first work and last work together,
And learn from the groans of all men,
That if he has not altered his feather,
He's certainly altered his pen.

Seeing that men of all sorts delight in girding at the professors of law and physic, it is strange that instead of making common cause together, lawyers and doctors rather cherish a mutual antipathy, which finds vent in an amusing interchange of asperities. Cross-examining Dr Warren, a New York counsel declared that a doctor ought to be able to give an opinion of a disease without making mistakes.

'They make fewer mistakes than the lawyers,' responded the physician.

'That's not so,' said the counsellor; 'but doctors' mistakes are buried six feet under ground; a lawyer's are not.'

'No,' replied Warren; 'but they are sometimes hung as many feet above ground.' The advantage was with the doctor.

It was on the other side when, disputing as to the comparative merits of their professions, Sir Henry Holland said to Bobus Smith, ex-advocate-general: 'You must admit that your profession does not make angels of men?' and the lawyer replied: 'There you have the best of it; yours certainly gives them the best chance.'

Said a pompous man of money to Professor Agassiz: 'I once took some interest in natural science; but I became a banker, and I am what I am!' 'Ah!' replied Agassiz, 'my father procured a place for me in a bank; but I begged for one more year of study, then for a second, then for a third. That fixed my fate, sir. If it had not been for that little firmness of mine, I should now have been myself nothing but a banker.'

The money-dealer must have felt as small as the American judge who, finding his enforced bed-fellow by no means overwhelmed by the company of a person of his dignity, observed: 'Pat, you would have remained a long time in the old country before you could say you had slept with a judge.' 'True for you,' said Pat; 'and yer Honour would have been a long time in the ould counthry, I'm thinking, before ye'd been a judge!'

Joseph Hume, the economical reformer, having occasion to visit Brussels when Sir Robert Adair was our representative there, mindful of the

minister's reputation as a host, lost no time in leaving his name at the legation. Remembering Hume's constant attempts to cut down official salaries, Sir Robert was inclined to ignore the hint; but taking second thought, invited the troublesome economist to dine with him. Hume put his legs under the ambassador's mahogany in the expectation of tasting the choicest viands and the most exquisite wines, but had to content himself with poor soup and poorer sherry, roast mutton and light Bordeaux, a chicken and a salad; supplemented with Adair's apologetical observation when the banquet was over: 'You see, sir, what these confounded Radicals have brought us to with their reductions. By-and-by, I daresay we shall come to prison diet, with pudding perhaps on Sundays.'

Scribe the dramatist met his match in a nobleman ambitious of gaining a literary reputation by proxy; from whom he received the following curious epistle: 'Sir—I have the honour to propose to you to associate yourself with me in the composition of a drama. Your name will figure by the side of mine; you alone composing the play, and I alone defraying all the expenses of the first representation. You shall have all the profits, for I work only for glory.'

Scribe replied: 'Sir—I have never been accustomed to harness together in my carriage a horse and an ass; I am therefore unable to accept your very kind offer.'

The nobleman closed the correspondence with: 'MONSIEUR SCRIBE—I received your note of refusal to unite our literary labours. You are at liberty not to understand your own interest, but not to allow yourself to call me a horse.'

World-be wits are apt to have the tables turned upon them. At a dinner in honour of Nick Denton, one of the staff of the Illinois Central Railway, his friend Jack Wallace, intrusted with the toast of the evening, proposed it in this wise: 'The two Nickes—Old Nick and Nick Denton!' Denton rose to respond, saying he appreciated the honour conferred upon him by connecting him with Mr Wallace's most intimate friend, and scarcely knew how to requite the compliment; but as one good turn deserves another, he would give 'The two Jacks—Jack Wallace and Jackass!'

Cham the caricaturist turning into a restaurant, chanced to take possession of the favourite seat of a stock-broker. Upon coming in and seeing how things were, the latter called the proprietor aside and inquired if he were aware that the tall thin stranger occupying his usual place was the executioner. The horrified man hurried to Cham and entreated him to go away, saying M. Heldenrich need not pay for what he had eaten if he would only leave at once. 'Who told you I was the headman?' asked Cham, without displaying any surprise at what he had heard. The landlord pointed out his informant. 'Ah,' said Cham, as he rose to depart, 'he ought to know me; I flogged and branded him at Toulon not two years ago.'

Hood once took a proper revenge upon some practical jokers who upset a boat before he could get out of it, giving him a thorough ducking. Directly he was safe on land he began to complain of cramps and stitches, and at last went indoors. His friends, rather ashamed of their rough fun, persuaded him to go to bed, which he immediately did. His groans and complaints increased so alarmingly that they were at their wits' end what

to do. Mrs Hood had received a quiet hint from the sufferer, and was therefore only amused at the terrified efforts and prescriptions of the repentant jokers. There was no doctor come-at-able; and all sorts of queer remedies were suggested and tried; the poet shaking with laughter, while they thought he was shaking with ague or fever. One rushed up-stairs with a kettle of boiling water, another tottered in under a tin bath, and a third brought a quantity of mustard. Hood then gave out in a sepulchral voice his belief that he was dying; and proceeded to give the most absurd instructions for his will, which his hearers could not see the fun of, for their fright. They begged him to forgive them for their unfortunate joke, and beseeched him to believe in their remorse; till unable to keep up the farce any longer, Hood burst into a perfect shout of laughter, which they thought at first was delirious frenzy, but which ultimately betrayed that the biters were bit.

General Charette, known some thirty years ago as a capital talker, clever versifier, skilful musician, bold better, daring horseman, and dead-shot, was as cool as the proverbial cucumber. He once hired a Hertfordshire manor for the shooting-season, and in following his game was not particular about trespassing on the adjoining estate, belonging to a lord of high degree. The latter's keeper out with his master one morning, heard the General blazing away in an adjoining cover, and calling attention to the intruder's proceedings, was instructed to go and shoot one of the General's dogs and turn him off the ground. 'You had better take my pony; you will get back quicker,' said his lordship; and the keeper cantered away on a perfect treasure of a pony, that its owner would not have parted with for any amount. Upon reaching the spot where Charette was blazing away at the pheasants, the keeper told him to get off the ground or, by his master's orders, he should shoot one of his dogs.

'Very well,' said the General; 'shoot the old one; but if you do, I shoot your pony; and as I am not sure where my manor ends, I shan't stir.'

The old dog dropped at a shot from the keeper; and before the man could turn round, the pony he bestrode was as dead as the dog.

'Now, my man,' said Charette in the mildest of tones, 'if you shoot again, the next barrel is for yourself!'

The keeper took to his heels, told the doleful story to his master, who had not made up his mind how to act ere he received a challenge from the General for insulting him by ordering his servant to shoot his setter. Seeing the sort of customer he had to deal with, the nobleman thought it best to come to an amicable arrangement and accept the defeat.

The editor of the *Terre Haute Journal* had the impudence to write: 'The reason why Lafayette doesn't build a rink is this. The ladies of that city have such big feet that no more than four or five could skate in a rink at one time; therefore the concern wouldn't pay.' Whereupon the *Lafayette Journal* retorted: 'It is a number eleven lie. The Lafayette ladies are celebrated for their pretty feet. All's well, you know, that ends well, and the *Terre Haute* editor, afflicted with the daily exhibition of agricultural hools, is dying of envy. Goodwin of our city once made a pair of twenty-eights for a *Terre Haute* belle. He built

them in the back-yard on a sort of marine railway, and launched them. If ever an old woman lived in a shoe, it was down at *Terre Haute*.

Ladies know how to give tit for tat, as a politician learned when, piqued by a fair listener noticing a pet dog while he was holding forth to her on the Eastern Question, he asked how a woman of her intelligence could be so fond of a dog. 'Because he never talks politics,' was the significant reply.

An Englishman attached to the Washington Commission incautiously remarked to his pretty American partner at a ball, that although he had seen many beautiful women, he had not come across a handsome man in the States. 'I suppose there are plenty of handsome men in England?' she observed. 'O yes, lots,' said he; provoking the poser: 'Then why didn't Queen Victoria send some over here?'

STORY OF A PARTRIDGE AND HER CHICKS.

ONE morning in the beginning of July an agricultural labourer, in the employment of an East Lothian farmer, was driving a reaping-machine in a field of long grass preparatory to haymaking. In a part of the field that the machine had not yet shorn, a hen partridge was sitting on a number of eggs which were within a few short hours of being hatched. It may naturally be conceived that the bird would hear with no little concern the sharp clipping noise made by the machine as, in its progress up and down the ridges, it approached nearer and nearer to the nest; but like a true mother, she would rather die than leave her nearly hatched young. As the knife of the machine, in quick shuttle-like motion, laid swath after swath of goodly rye-grass level with the ground, the iron fingers of the cutter struck the bird, killed her, and drove her some distance from the nest. To the moment of her death she kept the eggs warm; and the young life within them that she had cherished soon afterwards found protection.

The driver of the machine, who was a kind-hearted man, stopped his horses and gazed compassionately on the poor bird. Soon, however, his attention was withdrawn from the dead bird by hearing numerous minute, plaintive, peeping sounds—as if made by very tiny, fine-throated, tender chicks. Hastily concluding that a brood of young partridges lay buried and struggling for life in the nearest swath of grass, he turned it carefully over and over, in expectation of seeing a number of chicks; but after a diligent search, he could not discover any birds whatever. Still the peeping noises continued. The workman stood silent and listened attentively, in order that his ear might catch the true direction of the sounds. By the unceasing 'Peep, peep, peep,' he was attracted to a little hollow in the ground. There, almost hid from observation, lay sixteen sounding eggs, for it was from the eggs that the peeping chorus proceeded! The farmer, who was in the field, came to the spot where the driver was standing; and he being also of a humane disposition, placed the eggs carefully in his handkerchief, and carried them home to the farmstead, where they were soon placed under a common sitting hen. In a few hours afterwards the partridge chicks had broken

open their shells, and were running about their foster-mother crying 'Peep, peep, peep.'

The writer may be permitted to add, that when partridge chicks are hatched by a common hen, they should be intrusted to a gamekeeper or other person who understands the kind of food the birds need, otherwise it will be almost impossible to rear them.

THE FALL OF THE YEAR.

COLDLY and bright draws in the day;
Gloomy and drear it steals away;
For slowly now comes up the sun,
His Summer's ardent labours done;
And low his golden wheel declines
Where Winter shews his starry signs.

No more to earth the fervid beams
Give beauty such as poet dreams;
No more descends the glorious ray,
The rapture of the summer day,
The sky's deep blue is waxing pale,
The sun's inspiring fervours fall;
The slanting beam he gives is chill
Within the vale and on the hill;
And now, with many a jealous fold,
The clouds would all his cheer withhold,
Nor would on plain or height bestow
The soothing of his waning glow.

The flowers are gone, save those that still,
Like friends who cleave to us through ill,
Outbrave the bitter wind that blows,
And deck their season to its close.
The leaves that late were only stirred
By gentlest breath, that only heard
The song-bird's note, round these the blast
Blows keen and fierce, and rude and fast
The rising gale flings far and wide
Their withered bloom and idle pride.
The birds have fled; the wind alone
Makes song in many a sullen tone.

But sudden through the bursting sky
The sun again comes out on high;
The clouds fall back to yield him way,
And fly before his eager ray;
And gladness fills the breast again—
The glimpse of Summer come again!
Ah! sweet the beam, but like the smile
With which the dying would beguile
The mourning heart—the last sad ray
Love gives to cheer our tears away.
The light is gone, the moment's bloom
Is sunk again in cold and gloom.
So pass away all things of earth,
Whate'er we prize of love and worth—
The form once dear; the voice that cheered;
The friends by many a tie endeared;
The dreams the aching heart forgets;
The hopes that fade to cold regrets.

Sweet scenes, dear haunts, that once I knew,
My heart yet fondly turns to you.
Let seasons change, and be ye bright
With all the Summer-tide's delight,
Or let the Winter's gloom be yours,
Your beauty still for me endures;
For Memory keeps unfaded yet
What Love would have me not forget.

D. F.

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THRIFT AND UNTHRIFT.

WE lately said a word on Rich Folks, hinting that so far from being the monsters of iniquity which moralists and preachers have for ages denounced them, they are, taken all in all, public benefactors; for without the accumulation of wealth, by means of thrift and honest enterprise, the world would still have been in a deplorably backward condition. Riches are of course comparative. An artisan who by savings and diligence in his calling has insured for himself a competence for old age, is doubtless rich and respectable. Doing his best, and with something to the good, he is worthy of our esteem. What he has laid aside in a spirit of economy goes to an augmentation of the national wealth. In a small way he is a capitalist—his modicum of surplus earnings helping to promote important schemes of public interest.

Great Britain, with its immense field for successful industry and enterprise, excels any country in the capacity for saving. In almost every branch of art there is a scope for thrift beyond what is obtainable elsewhere. Thriftiness, however, among the manual labouring classes was scarcely thought of in times within living remembrance. Savings-banks to receive spare earnings came into existence only in the early years of the present century. Now, spread in all directions, and established in the army and navy, they possess deposits amounting to nearly thirty millions sterling. Besides these accumulations, much is consigned to Friendly Societies; and it is pleasing to observe that within the last twenty years, the artisan classes have expended large sums in the purchase of dwellings purposely erected for their accommodation. All this looks like an advance in thrifty habits—a stride in civilisation.

But after every admission of this kind has been made, it is too certain that vast numbers live from hand to mouth, save nothing whatever from earnings however large, and are ever on the brink of starvation. In this respect, the working classes, as they are usually styled, fall considerably below the peasantry

of France, who, though noted for their ignorance, and for the most part unable to read, have an extraordinary aptitude for saving; of which there is no more significant proof than their heavy loans to government when pressed to pay an enormous war indemnity to Germany. As the thrift of the French agriculturists sinks to the character of a sordid parsimony, which is adverse to social improvement, no political economist can speak of it with unqualified admiration. It only shews what can be done by two or three things—the economical use of earnings, the economical use of time, and the strict cultivation of temperate habits. From each of these predominating qualities a lesson might be judiciously taken. Though a lively race, fond of amusement, the French peasantry, and we may add, the peasantry of Switzerland, know the value of time. In them the 'gospel of idleness,' so pertinaciously preached up by indiscreet enthusiasts, has no adherents. In all our experience, we have never seen such assiduity in daily labour from early morn till eve, as among the French and Swiss rural population. They would repudiate any dictation of a hard and fast line as to hours. Time is their beneficent inheritance, to make the most of for themselves and families.

Pity it is that in our own country time is so unthriftily squandered. Obviously there is a growing disposition among the operative classes to diminish the daily hours of labour, to the detriment of individual and general prosperity. When we began life, ten hours a day, or sixty in the week, were considered a fair thing. Then came a diminution to nine, to eight hours, along with whole and half-holidays, but no lowering of wages. How this is to go on, we are unable to explain. We fear that unless something like common-sense intervene, a degree of individual and national disaster will ensue scarcely contemplated by the votaries of 'St Lubbock.' In his late speech at the opening of the Manchester Town-hall, Mr Bright adverted to the awkward consequences of indefinitely shortening the hours of labour. He is reported to

have said: 'We have for many years past been gradually diminishing the period of time during which our machinery can work. We are surrounded by a combination whose object is not only to diminish the time of labour and the products of labour, but to increase the remuneration of labour. Every half an hour you diminish the time of labour, and every farthing you raise the payment of labour which is not raised by the ordinary economic and proper causes, has exactly the same effect upon us as the increase of the tariffs of foreign countries. Thus we often find, with all our philanthropy in wishing the people to have more recreation, and with our anxiety that the workman should better his condition through his combination, that we are ourselves aiding—it may be inevitably and necessarily—but it is a fact that we are aiding to increase the difficulties under which we labour in sending foreign countries the products of the industry of these districts; and we must bear in mind that great cities have fallen before Manchester and Liverpool were known; and that there have been great cities, great mercantile cities on the shores of the Mediterranean, the cities of Phœnicia, the cities of Carthage, Genoa, and Venice.' Such sentiments are worth taking to heart. The preaching up of recreation, otherwise idleness, has gone rather too far. We begin to perceive that wages can be paid only in proportion to work done, and that if people choose to amuse themselves, there must correspondingly be a new adjustment of payments.

At the late meeting of the British Association, there was some profitable discussion on work, wages, and thrift. One speaker emphatically pointed out that unthrift was more concerned in producing poverty in families than a deficiency in wages. He said, that where there was a deficiency of food 'it would mostly be found that what was wanted had been consumed in drink.' Adding, 'As a matter of fact, the large families did the best, and the greatest men in science and as statesmen were mostly members of large families and younger sons upon whom early struggles for mental growth had produced brilliant results.' This corresponds with ordinary experience. Within our own knowledge, the greater number of persons distinguished in literature, the arts, and in commerce have been the sons of parents whose means of bringing up their families did not exceed a hundred, in some instances not eighty, pounds a year. Yet upon these slender resources, through the effects of thrift—as, for example, the case given by the late Sir William Fairbairn—families of six or seven children were respectably reared, and attained prominent places in society.

In almost every large town is observed a painful but curious contrast in the administration of earnings. On one side are seen the families of small tradesmen making a manful struggle to keep up respectable appearances at a free revenue of not more than a hundred a year; while alongside of them are families earning two pounds a week and upwards, who make no effort at respectability, and are constantly in difficulties. The explanation simply lies in thrift and unthrift. In one case there are aspirations and enlightened foresight; in the other there is a total indifference to consequences. A few weeks ago, the Rev. F. O. Morris, of Northholme Rectory, Hayton, York, communicated to the *Times* some remarkable revela-

tions concerning unthrift. 'A gentleman of my acquaintance,' he says, 'living in a midland manufacturing town, gave me, two or three years ago, the following instances of the unthriftiness, or rather the outrageous extravagance, of the artisans there; such cases being quite common, the exceptions only the other way. I must premise that many of them with families were at that time earning from eight to twelve pounds a week; a single man as much as five pounds a week, and yet, though paid on Saturday evenings, they would come on the following Monday night to ask the manager for an advance of the next week's wages. And this not for any legitimate expenditure, for even those who had families lived generally in one room, kept no servant, and only employed charwomen. Nevertheless, well they might be in want of ready-money, for often you would see a party setting out on a Sunday for an excursion to some place or other in a carriage with four horses, and dressed in the most extravagant manner, but at the same time with much taste, owing no doubt to their employment being in the lace-trade.

'A charwoman told the wife of my informant that she knew one married couple who can earn seven pounds a week who often came to her on a Thursday to borrow a shilling, their money being all gone. They lived in two rooms, very badly furnished. A needle-woman also told the lady that she knew a couple who earned eight pounds a week, or even more, between them, who lived in two rooms wretchedly furnished, without even a cup or saucer, besides the two they used, to give a friend a cup of tea; that the woman would give four or five guineas for a dress, and had given as much as six guineas, which she would wear all day, from the first thing in the morning till it was shabby, when she would buy another as expensive, or even more so, according to the fashion. She never cooked their own dinner, but bought the most expensive things, took them to a public-house to be cooked, and dined there, eating and drinking afterwards. The "hands" in the trade of the place would often order, for one week, black tea at 4s. a pound, and green at 6s. They would also buy cucumbers at 1s. and 1s. 6d. apiece, beefsteaks for breakfast at 1s. 3d. a pound, and would only eat them fried in butter; salmon in like manner when it first came in at 3s. or 4s. a pound, and lamb at a guinea a quarter. For more light fare they would buy oysters at 2s. or 2s. 6d. a dozen, put down gold on the counter, and eat them as fast as a man could open them for them. My friend saw two men thus eat 10s. worth standing at a stall in the market-place. A man earning L3 a week, paid on the Saturday evening, got into a row with the police on the Sunday, was fined 25s. on the Monday, and not one out of a hundred or more of his fellow-workmen could advance him the money to pay the fine with, and he had to borrow it of the foreman. Another was earning L4 a week. His master told him he ought to lay by. "Oh," said he, "I can spend all I make." "But," said the master, "what shall you do, if the times are bad, with your wife and children?" "Let 'em go to the Union," said he. The master himself told my friend this. Mr Baker, the Inspector of Factories, in one of his Reports, stated that a moulder, his wife, and boy on an average ear-

L.5, 10s. 6d. a week. He mentions a case of a moulder, his wife, and three children earning L.8, 7s. 2½d.

'How can we wonder, with such facts as these before us, that Mr Sandford, Her Majesty's Inspector, stated in one of his Reports: "Out of 50 (lads) examined in nine different night schools, 29, or 58 per cent., could not read. These night scholars are certainly not the most untaught of the collier lads. 'There's none of them as can read in our pit.' I heard two young colliers say; 'no, nor the master neither.' And yet we wonder how our colliers do not invest their earnings wisely."'

Loud and prolonged has been the denunciation of public-houses as the cause of crime and misery—so easy is it to mistake secondary for primary causes. While admitting that public-houses scattered in profusion are the cause of many evils, we go a little farther, and looking for what produces the cause, find that it consists in depraved tastes, want of self-respect, unthrift. 'To a man of elevated tendencies and intelligent foresight, the number of public-houses is a matter of no importance. He passes by the whole with indifference. Their allurements only excite his pity. He scorns their temptations. It is to this pitch of fortitude we should like to see the weak-minded brought, through education and the habitual cultivation of self-respect, along with a deep consciousness of responsibilities. In therefore so exclusively attacking public-houses as the cause of intemperance, we are in a sense beginning the process of cure at the wrong end. We are expending energies on secondary causes, leaving the seat of the disease untouched. Under infatuations of this kind, the misdirection of moral power is pitiable. The subject is wide, and might be expatiated on to any extent. We here confine ourselves to the remark, that the thing to cultivate is Thrift—not only as regards the expenditure of money but expenditure of time, and in saying this we fear that those who have systematically, though with good intentions, advocated a degree of recreation that must be deemed excessive and dangerous, have not a little to answer for in promoting habits of unthrift.'

W. C.

FROM DAWN TO SUNSET.

PART II.

CHAPTER THE ELEVENTH.

It was about this time, or some three or four days after Kingston's arrival, that Mistress Dinnage was sitting—languidly for her—at the door of the lodge. Mistress Dinnage lived a life of constant energy; she did not sit and lament; she had her sorrows; but they were closed within the proudest heart that ever beat, and no man knew of them. But all the more dangerous is the stern sorrow that feeds upon itself, the aching, ever-present grief, so stoically disregarded. Mistress Dinnage indulged in neither tears nor regrets; bravely she did her duty day by day, and never would sit down to court a sweet and fancied dream. But when evening came, what had she to do? Father was not home; the tall clock in the corner went

tick, tick, tick! Lady Deb was busied with her kinsman Kingston Fleming; old Marjory was no companion to Mistress Dinnage. Lives are so different. In some more genial lives, in some gay changeful or adventurous life, sorrow and despair are kept at bay. In contrast to this life of Margaret's, there was May Warriston far away, dreaming through courtly galleries, gazing on splendid pictures, listening to ravishing music, kneeling before gorgeous shrines. Amid such scenes as these, the heart-stings may be tuned to never a discordant note. But in eternal calm, in depressing sickness, in dreary hours of solitude, then the grim spectre looks on us face to face. We may work; ay, but when we pause to rest? Work, everlasting work, gives a stern sense of satisfaction and the comfort of 'something done;' but unlightened by sweeter moments, neither softens the heart nor strengthens the mind. Under that stern government, imagination sleeps, thought grows torpid, the poor wounded soul is grasped within the iron hand it defies, Nature herself lies bruised and bleeding.

In the hours of hard work and daylight, sorrow was to Margaret Dinnage unheeded, unheard, uncared for; but when forced inaction came, when the little room darkened slowly, and the lightest whisper of the breeze began to be heard above the hushed tumult of the world, then the tall clock told a monotonous tale moment by moment to the proud still heart—a tale of solitude and hopeless calm. She would go to the porch not to hear it; but to go out and roam about the happy fields she could not, for there she had played when a child. No; better stand at the door and watch; father would be coming soon.

One evening as Mistress Dinnage thus watched, the gate swung to; not the stooping form of old Jordan Dinnage, but a tall and tower-like figure loomed through the gloaming and darkened the doorway. Loud and full beat the heart of Mistress Dinnage; she could not speak. For the first time for years, she and Charles Fleming were alone.

'Who is at Enderby?' he asked, in a short stern voice.

'Mistress Deborah,' she answered, with hurried breathless utterance, 'an' Master Kingston Fleming.'

'Not my father?'

'No.'

'Has Master Sinclair been here lately?'

'Yes; he was over yesterday morning.'

Then the gloaming parted as it were to admit of a blink of sunshine, and the dark eyes that were gazing up sought the haggard eyes that were gazing down upon them, and all in a flash. Twilight and the wild sweet solitude around them drew those proud hearts together with a power that yearning nature could not resist. The spell of Love was woven around them. Not one word was uttered: stern silence, weary endless longing, pride, grief, trouble, despair, all were now hushed in one long embrace. Long and wordless as had been

estrangement, so swift and wordless the wooing; no syllable was needed to tell what the soul had known.

What mattered it in that supreme moment that he was a hunted ruined fugitive—that she was a poor and penniless girl—that they met but to part again? The sweet summer breeze was blowing round them; the trees trembled with gladness overhead; they were young; the world was wide and free. The solemn warning voice of the old clock, for them spoke in vain.

When Mistress Dinnage could speak, she whispered on his breast: 'Thou'rt in trouble.'

'In trouble? Yes.' Then, with a reckless laugh, he took her face between his hands, and answered by wild and passionate kisses.

'Nay; thou must speak,' she went on earnestly, and holding back his head with her little hands. 'Kisses will not aid thee, or I would kiss thee till I died. Speak, Master Fleming! Art thou ruined?'

'Ay; stick and stone.'

'I saw it in thy face, only now the love-light covers it. Oh, how canst thou look so glad for my poor love, when thou'rt ruined and disgraced? Bethink thee, Master Fleming. Thine old home will go to strangers. Thy sister will share in thy disgrace. Thy father will go in sorrow to the grave. Thou'rt ruined, disgraced, dishonoured!'

He caught her to his heart, and then held her wildly from him, regarding her with infinite pathos. '*And wilt thou throw me over, Meg?*'

Then spoke she anxiously: 'What is it thou mean'st? Speak out to me. Let there be no secrets and no riddling. Dost thou love me *truly*?'

Then answered the proud liquid glance of those dark eyes; and whispered the youth low in her ear: 'I would like to kill thee for this questioning! *Truly*, love? Dost thou know Charles Fleming so little, that thou'rt in doubt? that thou canst believe he could wrong the only girl he ever loved? Ruffian, gamester, roysterer though I be, I would keep thee pure as snow—snowdrift. Thou shalt make me a better man, who knows? For thy love I thirst, Meg, and have thirsted long. Now—ruined, an outcast, a fugitive, is the moment I choose to seek thee! Wilt have me, Meg, for better, for worse? Wilt share the fortunes of a sinner? Perilous, comfortless, will be thy lot, love. Wilt thou be my wife?'

She could not speak; she answered by a low cry of love and joy. What recked Mistress Dinnage of the proud grand home and the heir of the Flemings, all passed away! She loved—with all the pure abandonment of a woman's love—this houseless wanderer.

So came Charlie Fleming, and went, and haunted in the twilight round Enderby, and no one knew of it save Mistress Dinnage. She was put about, dismayed, torn by anxiety by all she heard; and the two loves of her life, the loves of father and lover, were wrestling wildly in her soul. Though fearing for her lover, yet, strange inconsistency, her step was light as air, her heart was filled with a new joy, and her eyes with happy tears.

'I must go,' thought Kingston Fleming desperately to himself, the morning after the above

scene. 'The old fellow won't turn up, neither does Charlie. I mustn't compromise *her*. But she must not be alone. I doubt—I doubt sorely about the future. Poor sweet child! I will speak to old Marjory; she must hold that flighty Mistress Dinnage in the house. And I will get Deb to send for May Warriston.' So thinking, Kingston went into the garden, where he saw Deborah at her flowers, and abruptly he began: 'I am come to say farewell, Deb. Don't look scared, little coz; you shall not be left alone.'

'Then whom shall I have, King?' she asked, elinging suddenly to his arm. 'Father is away; Charlie is away; and I am in hourly fear of evil tidings. You say, *not alone*! O King, I shall be alone indeed!'

'Little one, I am going to write to May Warriston, to beg her to come and bear you company. Meantime, I am going to see your father. I know his whereabouts, love; I will send him home to-night. And have ye not Marjory, Jordan, and your beloved Mistress Dinnage?'

'Ay, I have them all. But what are weak women and a poor old man compared to your size and strength? With you, King, I am safe. In your presence I can be thoughtless and glad again. In your presence—I am happy.'

'O Deb, Deb! Don't persuade me. I mustn't stay with you. Ill tongues will be talking of you and me.'

'What of brother and sister? Of kinsfolk? It cannot, cannot be. But let the world talk! What matters it? Will you, for paltry slander, forsake me at this strait?'

'Not forsake you, but consider you. Let go my hand, Deb! I am easily unmanned nowadays. I must go.'

'Well, go, go!'—and she pushed him from her. 'And indeed I would have you seek my father, King, for I am very sad at heart. Cheer him up; comfort him; wean him from his temptation if you can. It is that terrible gambling that is the ruin of the Flemings. Oh, tell him so! But above all things, send him home, for I have a dark, dark foreboding on me; and this night alone at Enderby would drive me mad.'

'He shall come.'

'Then go, King, quickly.'

'You are in a hurry to be rid o' me, now. Good-bye, sweet Deb; good-bye. You will not come and see me off?'

'Nay; I cannot.'

'Well, good-bye, Enderby.' Kingston Fleming bared his head and gazed round, strangely moved, at the old familiar scene. His keen blue eyes grew dim. It did not shame his manhood that tears were drawn like life-blood from his heart, as he nobly renounced a sore temptation. 'Good-bye, Enderby; good-bye.'

He was gone. But still Deborah Fleming, amid her gay and dazzling flowers, seemed to see him standing there, a tall graceful figure, a face full of sadness and regret, a bared head that reverently bowed its adieu; and the words still rang in her ears: 'Good-bye, Enderby; good-bye.' Ten short minutes and all life had changed for her; only when he was gone, she waked to her despair. The sun had ceased to shine, the birds had ceased to sing, the flowers to bloom. She left her gathered flowers to die, and went home like one stunned.

CHAPTER THE TWELFTH.

Sir Vincent did return that night; he had seen Kingston, he said. He was very late, and he was tired. He asked Deborah if Mistress Dinnage were with her.

'Yes, dear father. But you are going to sleep at home?'

'Ay; but I may be off early—too early for even thee, my bird of dawn.'

'Nay, father; I will be up, not to see thee off, but to hold thee here. Thou shalt not go to-morrow!'

He smiled. He looked pale. He kissed her fondly.

'Lady Wilful, I must. I want to see my boy. He is ever in trouble.'

'Nay; think not about it to-night, father. King has promised to find him out.'

And so they parted. Weary-hearted, with all the brightness called up for her father laid aside, Deborah sought her chamber, weeping. She recalled, the night when her father had told her Kingston Fleming was betrothed, her wild despair. But she was a child, and the bright morning had then brought hope and healing. Now she was a woman, and a woman's sorrow lay deep within her breast. Tired out, Deborah undressed and lay down on her bed, not to wake and weep, but to sink into a deep dreamless slumber. . . .

With a start she awoke. A start often wakes us from the soundest sleep, as if some spirit spoke. Deborah Fleming was so wide awake in a moment that she saw through her open window the little pale ghost of the waning moon, the drifting clouds flitting by. A strange feeling was on Deborah. Had she been dreaming that she had seen a light shining under her father's door? Dream or vision, she seemed to see it still, and was irresistibly drawn thither by a mysterious inner sense of alarm. She must go to her father's room, to see that all was well. With a wildly beating heart, she threw on her dressing-gown and went swiftly out. Gray dawn filled all the passages, a gray cold dawn, and the little birds were beginning to twitter. But yes—oh, strange and true, a light was glimmering under her father's door!

Deborah heard him moving; she knocked. 'Father!—No answer.—Father!'

'Who is there?'

'Deborah! Father, open your door; I must speak with you at once.'

She tried the door: it gave way; and Deborah saw a room scattered over with papers, in the wildest confusion. The window stood open, and Sir Vincent, looking gray and haggard in the uncertain light, stood against the table in the middle of the room. He was dressed; his long white hair was ruffled; his face was gray, pale; his eyes gleamed strangely on Deborah from under their lowering brows.

'Father!' said Deborah, 'my father!' A great trembling was on her, he looked at her so strangely; but she kept outwardly calm. She laid her hands upon his arm, and then her eyes fell from his troubled face to his trembling hand, which was striving vainly to hide something amongst the papers on the table. Deborah saw the handle of a pistol; she drew it out, and regarded him steadfastly. 'Father, father! what is this?'

He turned from her; his white head was bowed with shame in his hands, and she heard a bitter sob.

'I know it now,' said Deborah, with terrible calmness. 'God called me here. O dear father, what have you thought on? To get free of ruin, you would kill your soul. Kind heaven have mercy on thee! You would leave me, father; you would leave me and Charlie.' She flung the pistol out of the room; she threw her arms round him. Sobs were shaking the strong man's frame.

'O never think to leave me alone, father dear. It was sinful of you not to call me; you might have known your little daughter would sooner share your death, than wake to find you dead.'

'God forgive me, Deb; God forgive me;' and he sank into his chair faint, trembling, shuddering. Deborah, on her knees beside him, scarcely knew her proud father, he was so unmanned. She waited in silence, with her head laid down on his knee. When he could speak, he said: 'I see God's hand in this; I believe in Him as I never believed before. Child! nothing less than a miracle brought thee here, as heaven is my witness; in another moment, Deb, I should have been a dead man. I had the pistol in my hand; may He forgive me, Deb!'

Then Deborah looked up white and calm: 'What could have induced you, father? What ruin could be great enough to justify so great a sin? The loss of house and lands? Let them go. You and I had better live in some poor honest way, than keep at Enderby. Let it go. It is no great matter, so long as you have your children's love.'

He groaned. 'It isn't all, Deb; ruin isn't all. We have that, and now. But ye know the old saying, "Death before dishonour."—Charlie, Charlie!' and the father's tremulous lips struggled piteously to utter more.

'Has Charlie disgraced us then? How, father?'

'God forbid that I tell thee how. My boy has killed me.'

'Will money save him, father?'

The stern low voice scarcely seemed Deborah Fleming's. 'Money, ay; but we are beggars.'

Deborah started to her feet. 'Well, think of it no more; you are wearied to death, my father. Thinking won't right you nor save Charlie. Sleep in peace, father, for I will save ye both this day.'

He stared in her face. 'Heaven bless thee, Deb. I know not what thou say'st. I think my brain is shaken, Deb. But thou'rt my only stay.' With that, the heart-broken old man, fallen so lowly from his high estate, lay down, and fell into a deep sleep. Not so Deborah.

Late in the morning, Sir Vincent awoke, and called for his daughter. It seemed that she was near, for he had scarcely called before she stood beside his bed. His strength was recruited; the strong and nervous spirit had regained its power, and lived again in torture. He gazed up at Deborah, piteous in his grim sorrow; still, in all his strength, he turned to her: 'Deborah, my child, what is to be done?'

'I am decided, father. I will be Adam Sinclair's wife. He has money enough to buy Enderby. Look you, you have nothing more to say; only see that he knows he may marry me.'

'Thou'lt marry Adam Sinclair? Deb, art in earnest? Can ye do this? But does it vex ye, love? Does it grieve ye too much?'

She looked so calm, he could not believe this sacrifice, but half believed her indifferent; he was sorely trembling.

'Nay, father. How vexed? how grieved? Ask me no questions. You know, father, I was always "Lady Wilful," and very firm. Here now is a note writ by mine own hand to *him*. I am decided.'

Sir Vincent rose up; he knew not if he were most glad or grieved or scared, as he took her in his arms and blessed her. Never had Deborah received love or blessing so passively. She put the note in his hands, and looking at him with her great gray earnest eyes: 'Sweet father,' she said, 'it must needs be soon; and that he may know that I am in earnest, I have left that "soon" to him. I am sincere with him, father, and I tell him I have no love to give; but I would fain save Enderby; and so I ask him if he will save Enderby for love of me, and yet leave me free. There is a loophole, father, for I have no wish to wed. But if he must wed Deborah Fleming, and only this will move him, I am ready. But as he will choose the wedding-day, I stipulate for freedom till that day, never to write nor meet till the bells ring for the wedding. Let me be Deborah Fleming till then, and forget Adam Sinclair! Lovers and wooing I cannot abide. And life is long enow from the wedding to the grave!'

Sir Vincent stood with the letter in his hand. 'Deborah, ye speak strangely; yet you are smiling, and your eyes and cheeks are bright. Little one, tell thy wretched father if thou'rt unhappy over this! Speak, Deb, darling; and if it grieves thee, I will see myself in jail, and Charlie on the gallows, ere thou shalt sacrifice thy life. Deborah, be honest with me.'

'Why, I am honest always. It will not hurt me. I will be a good wife to him till the day I die, if it must needs be so. But would you have me say I love him, reverence him? This cannot be. But if he will not save Enderby otherwise, I will be his wife. Of the rest—I will not ask you—I dare not. But Charlie shall be saved.'

At these words Sir Vincent fell on his knees, and kissed his child's dress like one beside himself, and then pale and wordless, rushed away. . . . Then Deborah was left *alone*. The gay sun was shining in, and the birds were singing from far and near; away up, Deborah's pet bird the skylark was pouring out his supreme song of freedom in the blue fields of space. She heard the trilling cadence from the wild bird's throat. It drew her to the window, where she leaned out, and drank in those delicious strains of joy, and stretched out her arms to the blue sky, and thought of the little nest where the bird would drop, when tired with wandering and with song. Could she be Deborah Fleming? Would the messenger now speeding to Lincoln Castle bring her back freedom, or death in life? She must wait, she must wait! Meantime, the o'ercome was ringing in her ears of an old song that Kingston Fleming whistled when a boy, and the sweet warm sun was shining on her, and Deborah laid her aching head and her arms down on the window-sill and fell fast asleep. It was then that Mistress Dinnage stole in; her face too was pale and grave, but not so pale as the sleeping one over which she leaned. With her hands clasped, she stood regarding it till her lips quivered, and tears of troubled anxiety

started to her eyes. 'Ay,' she said with stern tenderness, 'you will die for him yet; but I would die for *him* and *you*.' Then softly and in tender care, young Mistress Dinnage passed a soft cushion under the little head, and laid a light shawl over Deborah to shield her from the sun, and stole away.

MARKET-GARDEN WOMEN.

WHILE the fruit-harvest is in progress, travellers through the western outskirts of London will doubtless have noticed the numerous gangs of women employed in gathering and packing fruit and vegetables for market; the railway in that district running for several miles through market-gardens and orchards. The peculiar dress of these women—consisting of a large calico sun-bonnet, brightly coloured neckerchief, short skirts reaching scarcely below the knee, and large holland aprons—is alone sufficient to attract attention, even in the momentary glimpse one obtains of them as the train sweeps past. Daily, in sunshine and rain, these women are busy collecting the fruit and vegetables which are nightly conveyed to the London markets; and as some knowledge of their manner of life and the amount of their earnings may prove interesting, we offer to our readers the substance of a conversation held with a member of one of the gangs during the earlier part of the season.

'Do we get pretty good wages? Well, you see, sir, it all depends on the season. Just now, when strawberries are in and peas, we can earn as much as thirty shillings a week—some weeks more. Raspberries and beans we do pretty well with, but gooseberries and currants ain't so good: eight-and-twenty shillings a week is as much as we can make at those, working hard and long for that. Of course we have to work long hours, beginning at four or five o'clock in the morning, and keeping at it till eight and sometimes later at night, generally taking about an hour's rest at dinner-time. But as we gather all the fruit by piece-work, and so to speak, our time is our own, what dinner-time we take depends on what sort of a morning's work we've made—sometimes longer and sometimes shorter. You see, this is how we work. In my gang there's six of us, that have always worked together for a good many years now. We get one on each side of a row of strawberries or raspberries or peas, or what not; and when one basket is full, we puts a few handfuls in our apron, always managing so as to take in all the baskets full together; and then at night, when our work is counted up, we share it equally amongst us. We always know every night how much we have made, but only get paid once a week, on Saturdays: Saturday, you know, being an easy day with us, on account of there being no market on Sunday. Our missis is very good that way: every Saturday, afore twelve o'clock, there is our money, much or little; though there is some of the masters as think nothing of keeping their women waiting about till six or seven o'clock at night before they pay them, and perhaps then only gives 'em a part of it; which comes hard on folks as live from hand to mouth, as we have to do; the shop at which we deal only giving one week's credit—pay up one Saturday night, and run on as much as you like till the next; or if you don't pay up, no more credit till you does.'

'Apples and pears and such-like fruit we have nothing to do with—men gather *them* in. In fact as often as not the master sells the fruit as it stands on the tree, and the buyer has to get his own men to pluck it. But there's always some sort of fruit or vegetables to be gathered from the beginning of spring till the end of summer as we can do by piecework; and then the potatoes come in, which we pick up after they've been turned out of the ground by men or by a machine; but that we does by day-work, getting one-and-sixpence a day when we work from six to six; and one-and-two-pence when we work from eight till dark. In winter-time there's always something to be done dibbing in cabbage-plants, weeding, and such-like; but what with sharp frosts and heavy snows, we don't earn much then, perhaps doing three or four days' work in a week. Of course if we haven't had the sense to put by some of the money we make in the good times of summer, times come cruel hard on us in the winter; and very few of us like to apply to the parish if we can anyhow help it. Not but what our misis is good to us in that way, often finding us a day's work when it ain't needed, and always giving us a half-pint of beer at the end of the day; which we can't claim, you know.

'We don't take much count of rain either winter or summer, because, you see, people will have their fruit and vegetables fresh gathered; and so we wrap ourselves well up and make the best of it. As I said before, Saturday we don't do much; but then we have to make up for it on Sundays, so as to send the fruit fresh to Monday's market.

'Don't we suffer from rheumatics? Well, you mightn't think so, but it ain't often any of us ails much. You see, being out in all weathers, we get hardened to it; and besides, we always take good care to keep our feet warm and dry—that's why we wear such heavy boots; and that's the chief thing to look after, if you don't want to catch cold; so people say. There ain't many of us but what is on the wrong side of thirty; four out of *my* gang being widows this many a year, with grown-up sons and daughters; and it's the same in most gangs. Sometimes we have young women amongst us; but there's not many of 'em stays at it after they are married; not all the year through, I mean; perhaps coming for a day or two at the busiest times; but even then it hardly pays them, if they have a young family about 'em. The gangs of young women as you sometimes see, we don't count as belonging to us; they only coming up from Shropshire mostly—for a month or six weeks at the busiest part of the season. Children we never have working with us, I suppose because they wouldn't be careful enough about not crushing the fruit; which as you know, it would never pay to send crushed fruit into market. For my part, I'm very glad as there is no children allowed amongst us, as though it ain't very hard work, it's terribly tedious and back-aching. When our children is old enough, we send the girls out to service somewhere; and there's always plenty of work for the lads, of some sort, about the farms; which is a good deal better than breaking their backs at our work.

'We all of us in *my* gang live hereabouts, in those little cottages that you see yonder. Three shillings a week the rent of 'em is; but then there's a good piece of garden-ground at the back; and most of us has lodgers, young men what work

on the farms and in the gardens mostly. Four rooms there is in my cottage; and I have three lodgers, sometimes four, two sleeping in one room. Good lads they are too. You see, as they get home before I do, I always lay my fire in the morning before I go out; and a neighbour of mine sets it alight in time for the kettle to be a-boiling when they come in to their tea at six o'clock; and they never misses leaving a potful of good strong tea for me to have when I get home; which you may be sure is all the more grateful through being the only hot drink I get all day, having only a drop of cold tea, which I carry in that can there, for my breakfast. And maybe if we are working near a public-house, we club up, and one of us goes and gets a drop of beer to drink with our dinners.

'If it wasn't for the lodgers, the gardens wouldn't be much use to us; but they generally take it in hand, and often comes to take a pride in it; so that we are never short of such vegetables as are in season; which helps a good way towards the rent. They also chop up my wood and fetch my water for me, and make themselves handy in a score of ways; indeed if I lost my lodgers, I don't know what I should do. It ain't much cooking I do in the week; but what there is to do I do after I come home. On Sunday the lads always look for a hot dinner; which when I'm at home, I cook for them; and when I'm at work I get all ready on Saturday night, and one of 'em takes it to the bakehouse to be baked. When we do work on Sundays, if we anyhow can manage it, we try to get done by three or four o'clock, so as we may be in time to dress and go to church; which as a rule we usually do.

'I can't read nor yet write, and I don't suppose as there's a many amongst the oldest of us as can. It wasn't much chance of schooling girls like us got in my time, as we was sent out to work at something or other when we was about nine or ten. I did go to school for a little while; but if I learnt anything I must have forgotten it again. The young ones are better off for the matter of that, and are always willing to read or write a letter for us when we want 'em.

'Nineteen years I've been at it regular now, six; and though I was left a widow with seven children, the oldest of 'em only ten and one at the breast, I'm proud and thankful to say as we've never had any need to ask once for a loaf of bread even from the parish, and trust as we never shall. I ain't the only one either, for there's Mrs Amblin as lives next door to me was left with nine children, oldest only twelve, and has lived to see 'em all doing for themselves without being beholden to nobody for a crust of bread. Some years, when the fruit has been backward or scarce, we've had a very close push to make ends meet; but it has only taught us to be more careful when we have a good season, and to put by a little more towards a bad one. We don't use any bank, bless you! what little we can manage to put by, we generally likes to have handy where we can put our hand on it when we want it. Of course, there's no telling what may happen; but while I have my health and strength left me, I shall always be able to earn as much as I need; and if it should happen as *they* fail me, well, what with lodgers and the shilling or two my children will help me with, I daresay I shall struggle along somehow. Mostly, though our children don't come to be much more than field-

hands and farm-labourers, when the time comes they don't begrudge what is due to their parents, and manage somehow to keep 'em out of the work-house. Not but some of 'em goes to the bad, as might be expected, seeing the little schooling we can afford to give them, and the temptations there is for them nowadays; but it is only here and there one, and they generally finish up by listing for a soldier, which soon steadies 'em. One of my lads is away now in the East Indies; and though I don't often hear from him, he seems to be getting on quite as well as ever he'd ha' done at home. Our girls mostly gets acquainted with one or other of the men working about the place where they are at service, and get married, sooner perhaps than what we old folks think they ought to—about nineteen or twenty—and settle down near where their husbands work.

'We don't get much chance of holidays when once the season begins, until it is over; because, you see, sir, the master must keep the market supplied; and if he finds one of us not to be depended on to do our work every day, he very soon gets somebody in her place that is; which perhaps is one reason why young women never care to settle down to our life. Altogether, our work ain't so very hard; and if we do have to keep at it for a many hours at a stretch, it's all in the open air, which is a good deal better than being shut up in the walls of a factory; and if we are anyways steady and careful, we can always make sure of a pretty good living. So that you see, sir, there's many as is worse off than us poor garden-women.'

SEA-SPOIL.

SOMEWHAT more than a year ago, we called attention to the changes which are to be perceived in the relations of land and water; the action of rivers on the land, and the influence of delta-lands in restoring land, to the earth, being noted in the article alluded to; whilst the destructive action of the sea on many points of the coast was also detailed. In the present instance we purpose to examine a few of the more typical cases of sea-action viewed in its destructive effect upon the land, and also some aspects of earth-movements which undoubtedly favour the destructive power of the ocean.

As regards these destructive powers, much depends of course on the nature of the rock-formations which lie next the sea. A hard formation will, *ceteris paribus*, resist the attack of the waves to a greater extent than a deposit of soft nature; and the varying nature of the coast-lines of a country determines to a very great extent the regularity or irregularity of the sea's action. A well-known example of a case in which the ocean has acquired over the land, an immense advantage in respect of the softness of the formations which favoured its inroad, is found on the Kentish coast. Visitors to Margate and Ramsgate, or voyagers around the south-east corner of our island, know the ancient church of Reculver—or the 'Reculvers' as it is now named—as a familiar landmark. Its two weather-beaten towers and the dismantled edifice are the best known objects amongst the views of the Kentish coast; and to both geologist and antiquary the 'Reculvers' present an object of engrossing interest.

In the reign of Henry VIII. the church was one mile distant from the sea; and even in 1781 a very considerable space of ground intervened between the church and the coast-line—so considerable indeed, that several houses and a churchyard of tolerable size existed thereupon. In 1834 the sea had made such progress in the work of spoliation, that the intervening ground had disappeared, and the 'Reculvers' appeared to exist on the verge at once of the cliff and of destruction. An artificial breakwater has, however, saved the structure; but the sacred edifice has been dismantled, and its towers used as marine watch-houses. The surrounding strata are of singularly soft nature, and hence the rapidity with which the eroding action of the waves has proceeded.

An equally instructive case of the destructive action of the sea is afforded by the history of the parish of Eccles in the county of Norfolk. Prior to the accession of James VI. to the English crown the parish was a fairly populous one. At that date, however, the inhabitants petitioned the king for a reduction of taxes, basing their request on the ground that more than three hundred acres of their land had been swept away by the sea. The king's reply was short but characteristic. He dismissed the petition with the remark, that the people of Eccles should be thankful that the sea had been so merciful. Since the time of the niggardly sovereign just mentioned, Eccles has not been spared by the sea. Acres upon acres have been swallowed up by the insatiable waves, and as Sir Charles Lyell informs us, hills of blown sand—forming the characteristic *sand-dunes* of the geologist—occupy the place where the houses of King James's petitioners were situated. The spire of the parish church, in one drawing, is indeed depicted as projecting from amongst the surrounding sand-dunes, which the wind, as if in league with the ocean, has blown in upon this luckless coast.

The comparison of old maps of counties bordering on the sea with modern charts, affords a striking and clear idea of the rate and extent of this work of destruction. No better illustration can be cited of the ravages of the ocean than that exhibited in maps of the Yorkshire coast-lines, and particularly in the district lying between Flamborough Head and the mouth of the Humber. Whilst the district between the Wash in Lincolnshire and the estuary of the Thames shews an equally great amount of destructive change. Three feet per annum is said to be no uncommon rate for soft strata in these localities to be carried away; and the geologist may point to the famous Goodwin Sands—notorious alike in ancient and modern history—as another example of the results of sea-action, and of the wear and tear exercised by the mighty deep. The contemplation of such actions fits us in a singularly apt manner for the realisation of the full force and meaning of the Laureate's words:

There rolls the deep where grew the tree.
O Earth, what changes hast thou seen!

It is highly important, however, to note that the sea receives aid of no ordinary kind in its acts of spoliation by the operation of certain forces affecting the land itself. Land frequently disappears from sight beneath the surface of the sea by a process of subsidence or sinking. We must

therefore clearly distinguish between the land which the sea literally takes by its own act, and that which becomes its property through this curious subsidence and sinking of the earth's crust. No doubt the result is practically the same in each case; the sea being in either instance the gainer, and the land the loser. But the sinking of land being a phenomenon less familiar to the ordinary reader, we venture to note a few of its more prominent aspects.

A primary consideration to which it is useful to direct attention consists in the due appreciation of the fact that the land and not the sea is to be here credited with the action under discussion. When a considerable part of a coast-line formerly existing above tide-marks is found to gradually sink below the sea-level, the observer is probably apt to assume that the sea has simply altered its level. The idea of the sea being a constantly changing body is so widely entertained, and that of the land being a solid and immovable portion of the constitution of the earth, is also so deeply rooted in the popular mind, that it may take some little thinking to throw on the land the burden of the change and alteration. It is nevertheless a fact that the great body of water we name the ocean in reality obeys the laws we see exemplified in the disposition of the water contained in a cup or bowl. The water of the sea thus maintains the same level, and is no more subject to violent and permanent alterations than is the water in the cup or bowl. Hence when part of a coast-line appears to become submerged, we must credit the land with being the seat of the change, seeing that the sea must be regarded as stable, unless indeed it could be shown that the level of the sea had undergone a similar change on all the coasts it touches. Thus if the southern coast of England were found to have been depressed say to the extent of six feet, we must credit the land with the change, unless we could show that the sea-level on the opposite or French coast had also changed. Now the alterations of land are mostly local or confined to limited areas, and are not seen in other lands bounded by the same sea or ocean as the altered portion. Hence that the land must be regarded as the unstable and the sea as the stable element, has come to be regarded as a fundamental axiom of geology.

When, therefore, the works of man—such as piers, harbours, and dwellings—become the spoil of the sea, the action has either been one effected by the force of the waves without any change of level of the land, or one in which land has simply subsided independently of the destructive action of the sea. In the extreme south of Sweden this action of land-subsidence is at present proceeding at a rate which has been determined by observations conducted for the past century and a half or more. The lower streets of many Swedish seaport towns have thus been under water for many years, and even streets originally situated far above the water-level have been rendered up as prey to the sea by this mysterious sinking of land. Linnæus (as on a former occasion we remarked) in 1749 marked the exact site and position of a certain stone. In 1836 this stone was found to be nearer the water's edge by one hundred feet than when the great naturalist had observed it; the subsidence having proceeded at this rate and degree in eighty-seven years. The earliest

Moravian missionaries in Greenland had frequently to shift the position of the poles to which they moored their boats, owing to the subsidence of land carrying their poles seawards, as it were, by the inflow of the sea over what was once dry land. On the coasts of Devon and Cornwall the observer may detect numerous stumps of trees—still fixed by their roots in the soil in which they grew—existing under water; the site being that of an old forest which was submerged by the sinking of the land, and which has become converted into spoil and possession of the sea. Even the long arm of the sea—the 'loch' of the Scotch and the 'fjord' of Norway—which seen in the outline of a map, or in all its natural beauty, imparts a character of its own to the scenery of a country, exists to the eye of the geologist simply as a submerged valley, whose sides were once 'with verdure clad,' and on whose fertile slopes trees grew in luxuriant plenty. The subsidence of the land has simply permitted its place to be occupied by water, and the vessel may sail for miles over what was once a fertile valley.

Occasionally the fluctuations of land may be exemplified to an extent which could hardly be expected, a fact well illustrated by the case of the Temple of Jupiter Serapis at Puzzuoli on the Bay of Naples. This temple, now in ruins, dates from a very ancient period, three marble pillars remaining to mark the extent of what was once a magnificent pile of buildings. Half-way up these pillars the marks of boring shell-fish are seen; some burrows formed by these molluscs still containing the shells by means of which they were excavated. At the present time, the sea-level is at the very base of the pillars, or exists even below that site. Hence arises the natural question—'How did the shell-fish gain access to the pillars, to burrow into them in the manner described?' Dismissing as an irrelevant and impossible idea that of the molluscs being able to ascend the dry pillars, two suppositions remain. Either the pillars and temple must have gone down to the sea through the subsidence of the land, or the sea must have come up to the pillars. If the latter theory be entertained, the sea-level must be regarded as having of necessity altered its level all along the Bay of Naples and along all the Mediterranean coasts. And as this inundation would have occurred within the historic period, we would expect not only to have had some record preserved to us of the calamity, but we should also have been able to point to distinct and ineffaceable traces of sea-action on the adjoining coasts. There is, however, no basis whatever for this supposition. No evidence is forthcoming that any such rise of the sea ever took place; and hence we are forced to conclude that the subsidence or sinking of the land contains the only rational explanation of the phenomena. We had thus a local sinking of land taking place at Puzzuoli. The old temple was gradually submerged; its pillars were buried beneath the waters of the sea, and the boring molluscs of the adjacent sea-bed fixed on the pillars as a habitation, and bored their way into the stone. Then a second geological change supervened. The action of subsidence was exchanged for one of elevation; and the temple and its pillars gradually arose from the sea, and attained their present level; whilst the stone-boring shell-fish were left to die in their homes. The surround-

ing neighbourhood—that of Vesuvius—is the scene of constant change and alteration in land-level; and the incident is worth recording, if only to shew how the observation of the apparently trifling labours of shell-fish serves to substantiate a grave and important chapter in the history of the earth.

The statistics of wrecks and of the amount of human property which have fallen a prey to the 'sounding main' may thus be shewn to be not only paralleled but vastly exceeded in importance and extent by the records of the geologist, when he endeavours to compute the losses of the land or the gains of the sea. But on the other hand, the man of science asks us to reflect on the fact that the matter stolen from us by the sea is undergoing a process of redistribution and reconstruction. The fair acres of which we have been despoiled, will make their appearance in some other form and fashion as the land of the future; just indeed as the present land represents the consolidated sea-spoil of the past, which by a process of elevation has been raised from the sea-depths to constitute the existing order of the earth. Waste and repair are simply the two sides of the geological medal, and exist at the poles of a circle of ceaseless natural change. So that, if it be true that the sea reigns where the land once rose in all its majesty, as the Laureate has told us, no less certain is it that—to conclude with his lines—

There where this long street roars, hath been
The stillness of the central sea.

Thus the subject of sea-spoil, like many another scientific study, opens up before us a veritable chapter of romance, which should possess the greater charm and interest, because it is so true.

THE ADMIRAL'S SECOND WIFE.

CHAPTER IV.—LAURA BROUGHT TO TASK.

THE Admiral says 'good-night' to the last of his guests; then he turns to his daughter, who is evidently preparing for a speedy retreat.

'Don't run away yet, Laura; we keep early hours at Government House, but it is not very late yet.'

Rather reluctantly, Mrs Best obeys. She knows perfectly well why her father wishes her to remain, and she shrewdly suspects what subject of conversation he is likely to introduce. Now that she has had her triumph, by carrying out a pet plan with regard to Katie, that very success makes her uneasy, for she knows she will be called to account. However, she resolves to be brave, and at once leads the way to the music-room. The servants have already put out most of the lights, but here the wax-candles are throwing lustre over scattered music and deserted seats. Laura gathers up some of the songs, wondering when her father will begin, and how the attack will open. She knows it is coming, for he is restlessly pacing to and fro the room with that quarter-deck march of his, that betokens an uneasy mind.

'Why were the Greys not here this evening, Laura?'

She smooths out the leaves of an Italian duet,

lays it on the music-stand, and replies with apparent indifference: 'Because they were not invited, papa.'

'Why not? I gave you the list, and I'm certain their names were down. Why did you omit them?'

'Is it always necessary to invite the same people over and over again? The Greys have been at every party that has taken place since I came here to stay.'

'Had you any particular reason for leaving them out, Laura?' asks the Admiral, turning round quickly, as he notes his daughter's slightly scornful tone of voice.

For a moment Mrs Best is undecided. Perhaps a slight meaningless excuse will do. But only for a passing second does she think thus. Her frank loyal nature asserts itself, and she says in a quick earnest manner, with her eyes a little lowered, her cheeks a little flushed: 'I had a good reason, papa. Kate Grey makes herself far too much at home here. One would imagine she has some special privilege in this house.'

'Well, and I am always glad to see her.'

'She knows that, and presumes on the knowledge. People seeing her so much at home at Government House, are beginning to talk in a most unpleasant manner.'

'What do they say, Laura?'

'They say you mean to make her your second wife. O papa, surely, surely you will never do that! A girl so selfish, so ambitious, so fond of admiration, so, so—'

'Stop, Laura! The category of faults you lay to poor Katie's charge is surely long enough. So people say I mean to make her my second wife, do they?'

A flush passes over the Admiral's face, and mounts to his brow. A quick throb rises at his heart, as for the first time he hears Katie's name coupled with his own. Till this moment, his thoughts about her have been vague and unsettled. He admires her very much—more than any other lady he knows; but the idea of making her an offer of marriage has never seriously entered his head. But now, his daughter's very cautions, her very reports of the world's gossip, shadow forth to him that a marriage between him and Miss Grey may not be so very preposterous after all, not such utter madness as he himself would have called it a few months ago.

Laura, seated on a music-stool, her hands clasped before her, and her eyes fixed on her father's face, reads its meaning at once; and as a brave, a loving, and a fearless daughter, she will not shrink from the duty she believes is required of her now. 'Dear papa,' she exclaims, 'let me entreat you not to risk your future happiness! Kate Grey would never make you a good wife. She cares far too much for herself ever to study the true interests of any other person.'

'Why are you so bitter against Miss Grey?'

'I am not bitter. I only tell the real sad truth.'

Don't let her come to rule in your house; don't let her rob me of my father's love.'

Sir Herbert draws near his daughter, and looks tenderly down at her flushed face and moistened eyes. 'Be reasonable, my child! No one can ever rob you of my love; but' (here he pauses, as though hesitating how to word his meaning—adding composedly enough) 'should I ever marry Miss Grey or any other lady, you must not be prejudiced against my choice, Laura. My marriage can never injure you in the least. Remember, your poor mother's fortune was all settled on you before you married Robert Best.'

'I am not thinking of money, papa. Mere money considerations do not influence me in the least.'

'Possibly not. But let me allude to the subject once more while we are talking. Robert has left you mistress of his fine estate. You have duties and responsibilities that separate you almost entirely from me now. Is not that the case?'

'Yes. I wish I could be more with you.'

'You cannot, Laura, without neglecting your own interests. Therefore I am at times lonely—very lonely in the midst of surrounding society and occupation. My house needs a head. My heart yearns sometimes for congenial companionship. Don't grudge me happiness, Laura, if I can see my way towards gaining it.'

'I hope and pray every possible happiness may be yours, papa; but don't look to Katie Grey for such a thing. She would marry any one to obtain position and wealth.'

Sir Herbert turns away, and walks to the end of the room; but he soon comes back again, and sees his daughter watching him with eyes that are misty and tearful.

'I am thinking of my own precious mother. Oh, how different she was from this girl! Miss Grey is all unworthy to take her place.'

In her earnestness, Mrs Best has risen from the music-stool, and stands before her father with great tears coursing down her cheeks. She raises her clasped hands to him in the most imploring of all attitudes. The snowy crispy dress with its white folds gives her a shadowy, almost ghost-like look; and as her pathetic entreating face turns to the Admiral, it almost seems to him as though the soul of her mother is appealing to him through Laura's eyes. Never has the likeness struck him so much. It is as though his beloved Bess had come from the grave to bid him beware.

The daughter sees the impression she has made, and like many another, presumes too much on her success, and goes a step too far. Had she stopped at this point, perhaps her father would have given her the promise she requires, that he will not marry Kate Grey. But Laura wipes away her tears, and exclaims: 'You are coming round to my views, papa! You are beginning to see how unfit this Katie is to be your wife. Miss Grimshaw quite agrees with me about her true character.'

Sir Herbert steps back—draws himself up to his full height. 'And what in the world does Miss Grimshaw know about the matter?'

'She has great powers of discernment. Indeed it was she who first roused my suspicions, and set me to watch Katie's mammyvres.'

'Very kind of her! I ought to be particularly grateful for her surveillance!'

A cloud gathers on the Admiral's brow; but Laura, unwarned, goes on: 'Adelaide Grimshaw is all kindness. O papa, I wish you would fix on her! She would fill the position of mistress to your household with tact and taste, and would make you an excellent wife.'

'Thank you for your suggestion, Laura; but be assured if ever I do marry, Miss Grimshaw will not be my choice.'

He shudders as memory recalls to his mind the lank figure of the very elderly lady his daughter commends to his notice. He recalls the faded face, the thin wiry curls, the lymphatic eyes, the bleating plausible voice, with which, in the calmest manner, she is wont to gossip over the frailties of her neighbours, and pass hard judgments on those who are younger and more attractive than herself. Then his thoughts revert to Katherine Grey. Whatever her faults may be, fortunately they are all the very opposite of Miss Grimshaw's: mind and body are altogether formed in a very different mould. After this, the conversation comes to a close, and father and daughter separate—she to lament over the Admiral's infatuation; he to wander for an hour or two more through the dimly lighted empty suite of rooms.

Laura's words have moved him strangely. His pulse quickens as he remembers that what has been to him a half-formed purpose, a whispered secret, is already the town's talk, and that everybody is watching to see what will come next.

Has Katie herself heard of these reports, and begun to trace out the shadow of possible coming events? Would she be very much surprised if he tried to give these airy rumours a solid foundation?

Such is the train of thought which floats through Sir Herbert's mind long after the great house is closed for the night, and left apparently to sleep and silence. He hears the measured tramp of the sentry on the cold damp pavement outside; the distant sound of the ships' bells in the harbour, as it is borne in by the wintry blast; and the musical peals from the church steeples that chime the small morning hours; but the question still rings its changes in his mind and finds no satisfactory answer.

CHAPTER V.—THE QUESTION ANSWERED.

The next morning Katie takes up her position at her father's writing-table. She has a letter to answer—a very confidential one from her friend and confidant, Liddy Delmere—and she feels bound to return confidence for confidence. Ere the epistle is finished, she starts up and thrusts it into her desk. Her eyes have been constantly wandering from the paper to the cold slippery streets, where people are jostling against each other as they make their way through the showers of falling sleet and gusts of rough wind. Surely no one would venture out except in a case of absolute necessity; yet the girl evidently expects *some one*; and by the rapid closing of her desk, no doubt the 'somebody' is in sight.

A tall upright figure may be observed emerging from the crowds of passers-by; an officer, by the gold buttons on his rough outside coat. Guiding his umbrella skilfully, Sir Herbert walks quickly on, and soon Katie hears his well-known knock

at the door, and his well-known step in the hall, as he takes his way to her father's library downstairs.

'He will come up here presently with some apology to me, or I'm much mistaken,' muses Kate, as she takes a swift look at herself in the glass; and ere long the door is thrown open, and Sir Herbert Dillworth announced. He glances quickly round the room, and this is what he sees: a pretty, well-harmonised interior, a blending of soft warm colours, and a blazing fire in the grate, that reflects itself in the polished steel surrounding it. And Kate Grey, the brightest point of the whole scene, is sitting beside the writing-table, and looking up with a smile to greet him. She wears a morning dress of ruby Cashmere, and a single knot of the same colour in the thick rolls of her dark hair. There is not a shadow of resentment in those lustrous eyes as she holds out her hand, frankly and pleasantly, to her visitor. Feeling perfectly self-possessed herself, she owns to a degree of satisfaction as she notices how disturbed Sir Herbert looks. The fact is his daughter's words are still ringing in his memory—'People say you mean to make her your second wife'—and he is wondering what Katie herself would say on such a subject. Will she ignore the dreary barrier of years that lies between them? Will she forget that he has gone some distance farther on in life's journey, while she is in the very prime and flush of girlhood? These thoughts flash through his mind, and make him appear nervous and absent as he begins to talk about last night's party. But his mind is made up.

'We missed you, Miss Grey. Will you pardon us that you had no invitation? My daughter is not much accustomed to sending them out.'

'Please, don't mention it, Sir Herbert. I am very glad to go to Government House when I'm wanted there; but one cannot always be invited, you know.'

'But I like you always to come. The omission shall not happen again. We had a wretchedly stupid gathering. Spare me similar disappointments in future, Miss Grey, by—by taking the right of arranging these matters into your own hands.'

The girl looks up inquiringly. Nothing can be more unsuspecting and guileless than the questioning eyes that meet Sir Herbert's.

'Will you take the right, Katie? My life has grown strangely desolate and lonely of late; will you cheer it with your presence? In short, will you be my wife?'

The question is asked now, eagerly and impatiently, and Miss Grey's eyes droop under the Admiral's gaze. This vision has been dazzling her mind so long; she has dreamt of it, thought of it; and now the offer of marriage has really come! Though the triumph is making her heart throb, she can hardly tell whether she is glad or sorry. But she does not draw back. For the treasure of Sir Herbert's loyal affection, for his true earnest love, she will give in exchange her youth and beauty. She thinks the bargain a fair one, and wonders can anything more be required.

When Sir Herbert leaves his affianced wife, he goes down to her father, to tell him of what he calls his 'good fortune.'

'Yes,' and mamma and Helen shall hear all about it from me. Won't they be surprised! adds the young lady with a short low laugh, as the

Admiral goes out of the room. She hears him close the library door, and then says to herself with another little spasmodic laugh: 'Every one will be surprised, as I am myself, to think how quickly it has all come about. Last evening I was excluded from Government House, and now I have promised to rule and reign there. Which has conquered—Laura Best or I?'

CHAPTER VI.—FAMILY COUNSEL.

Mr Grey's library is a curious little room, fitted up quite in his own way. Maps cover the sides of the walls, and a large bookcase holds the books, which are mostly nautical. Models of ships and steamers are on various shelves, there is an astrolabe near the window, and a sextant and some pattern guns on the table. Mr Grey is busy at the moment with official papers; his nimble fingers are copying a 'General Memo.' with wonderful rapidity. Hearing the stately step of his chief coming along the passage, he naturally supposes the Admiral has returned to give further directions about some orders ere long to be circulated amongst the ships. So he glances up over his spectacles pen in hand. Great is his surprise at seeing evident signs of agitation in Sir Herbert's face, as he says in a low tone: 'Put aside your papers for an instant, Grey. I want to consult you on quite another subject. I have come to ask your consent to my marriage with your daughter Katie.'

'Your marriage with my daughter, Sir Herbert!' and Mr Grey lets a huge drop of ink splash on his 'General Memo.' in his surprise.

'You seem astonished, Grey. Have you any objection to accept me as your son-in-law?'

'Pardon me, Sir Herbert, pardon my hesitation; but you startled me for the moment. I am conscious of the honour you are doing us; but have you considered how young and inexperienced Katie is? A mere girl, in fact. She is but little used to the ways of the world; hardly wise enough to hold the high position you offer her.'

The Admiral smiles. 'I will take the risk of all that. Katie is willing, and I am ready to marry her just as she is.'

'Then I give my full sanction.'

'Wish me joy, Grey. You don't say a word about that.'

'I will wish you something better and deeper than mere joy, Sir Herbert. I pray you may have true and unmix'd happiness with my daughter. May she prove a wife worthy of you, and may you never regret your choice.'

There is a tremble in Mr Grey's voice as he grasps the Admiral's hand and ratifies the new bond sprung up so suddenly between them; and he looks thoughtfully after Sir Herbert as he leaves the room. Surely women are fickle, and his daughter Katie the most fickle of her sex!

Only two months ago, Walter Reeves had come into that very same room on the very same kind of mission. The same, but with a difference. He has not actually proposed for Katie, but had asked permission to visit at the house with that intention, in the event of his love being reciprocated. And Katie knows all this, and up to the present has received Walter's attentions, and seemed to take them as her right. But now all this is set aside, and a man nearly as old as her father himself

has stepped in and won the girl as a willing prize. Well may the old sailor marvel! Things have changed since the days 'long ago,' when he wooed his wife, and waited nine long years for her because he could not afford to marry sooner. His true old-fashioned love has but intensified as years have sped on; the trials of life have but drawn the wedded pair closer to each other. Will this be the experience of Katie and the Admiral?

Worthy Mr Grey cannot settle that point; so he goes up-stairs to hear what Katie herself has to say on the subject.

Miss Grey lingers in the drawing-room after the Admiral has gone. There seems something strangely sad and vague and solemn in the whole affair, now it has gone so far; and when her mother comes into the room with Helen leaning on her arm, she exclaims at once, with glowing cheeks and flashing eyes and defiant tone: 'Wish me joy, mother, and Helen! I am going to be married!'

'I'm glad it is settled at last, Katie; and I hope you will be very happy. Walter has had plenty of patience, I'm sure,' says Mrs Grey in her quiet voice, as she settles Helen comfortably on the sofa and turns round to give Katie a kiss of congratulation.

But her daughter draws back with a look of annoyance.

'Why do you talk of Walter? I am not going to marry him. My intended husband's name stands far higher in the Navy List. I'm going to be married to Admiral Sir Herbert Dillworth!'

'Sir Herbert!' exclaim Helen and her mother together.

'Yes. Why are you surprised?'

'I'm sure you've good reason for surprise, considering all that has gone on about Walter. Katie, Katie! what new fancy has hold of you now? The voice is Mrs Grey's, the tone one of reproach.

Katie is growing angry. 'The fancy is no new one, mother. Had you not all been very blind, you might have guessed what was coming long ago.'

'Do you really love Sir Herbert?' asks Helen, with that deep-seeing look of hers, that somehow always makes her elder sister a little in awe of her.

'I like him; the rest will come by-and-by; and I'm glad and proud of my lot.'

There is a ring in Katie's voice, as though she has flung down the gauntlet of self-approval, and challenges any one to take it up and contradict her. Her father is not the one to do this. He comes into the room at the moment, hears Katie's asseveration, and feels as if a world of doubt had rolled away from his mind. Considering his own word 'his bond,' he judges his daughter by the same standard. 'That's right, Katie, and sounds earnest. You may well be proud of your lot, and of Sir Herbert too: there isn't a better, braver, more honourable man alive; he's unselfish and high-principled to his heart's core. I've served three commissions under him, and ought to know him well; and I'd rather see a child of mine lying in her grave, than that she should bring discredit on his name. Kiss me, my girl! I wish you happiness. Well may you be proud of our Admiral!'

Katie receives the kiss just a little impatiently; she believes she has won 'high stakes,' and does not relish any doubts on the subject.

THE CROCODILE AND GAVIAL.

Two species of crocodile inhabit our Indian rivers, and both are especially numerous in such streams as the Ganges and its tributaries, the Berham-pooter, and many others. Sir Emerson Tennent, in his *Natural History of Ceylon*, points out an error which Anglo-Indians and others are often given to—namely, of applying the term *alligator* to animals which are in reality *crocodiles*. There are no alligators in the Indian peninsula. The true alligator is the hideous cayman of South America, and differs in one or two important respects from the crocodile of the Nile and Ganges.

The first and by far the most widely distributed of the two saurians inhabiting our Indian rivers is the common crocodile, exactly similar to the animal frequenting the Nile and other streams of Northern Africa, and known throughout Bengal by its Hindustani title of 'Mugger.' The second species is the Gavial or Gharial (*Gavialis Gangeticus*). This reptile is, I believe, only found in Hindustan, and is indigenous to the Ganges; hence its specific title.

The habits of the two creatures are in general very similar, but yet differ in one or two important points. The mugger often grows to an enormous size, not unfrequently reaching twenty feet in length, and is thick built in proportion. The limbs are short, feet palmated, the fore-feet furnished with five, the hind with four toes. The head (which in aspect is extremely hideous) is broad and wedge-shaped, the muzzle rather narrow, the eyes small, deep set, and of a villainous glassy green hue. The jaws when shut lock so closely and firmly together as a vice. The teeth are of a formidable description, varying much in size and length. When the mouth is closed, the tusks in the extremity of the lower jaw pass completely through and often project above the tip of the upper. The body is incased with scaly armour-plates, very thick and massive on the back, but to a less extent on the sides of the body. The reptile breathes through its nostrils, which are situated near the tip of the snout. By this wonderful provision of nature, the crocodile is enabled to lie in wait for its prey with the whole of its body, except the nostrils, concealed beneath the surface of the water.

The gavial much resembles the mugger in general structure (though the body is not usually so thickly built), with one notable exception, and that is the totally different shape and character of the snout. The jaws of the gavial are long, straight, and narrow; the teeth, which are regular, wide apart from one another, and even, are of a far less formidable description than those of the common crocodile. They much resemble in general appearance the rows of jagged teeth which garnish the edges of the upper jaw of the saw-fish. The snout is often several feet in length, and there is a peculiar knob or protuberance at the tip; and the nostrils, as in the other species, are situated near the extremity.

The gavial has been described by some writers as 'the scourge of the Ganges' and a 'ferocious animal;' but I venture to say that this is a highly

exaggerated if not an altogether erroneous statement. It is possible that occasionally—though I am convinced *very rarely*—the gaviol may seize a human being; but the reptile is essentially a fish-eater, and unlike the mugger, is little to be dreaded by the swimmer or bather. I have frequently, when strolling along the banks of our Indian rivers, observed the head of a gaviol momentarily raised above the surface of the water in the act of swallowing some large fish held transversely across its jaws, the long beak and rows of sharp teeth with which nature has furnished it, greatly assisting the creature in snapping up such slippery prey.

Crocodiles frequent the wide open channels and reaches of our large Indian rivers, especially in the neighbourhood of large towns, such as Dinapore, Allahabad, or Benares. In such resorts, whole families of both gaviols and muggers may be seen lying together side by side on points of sand or low mud islands left dry by the current of the stream; they delight to bask in the scorching rays of the mid-day sun.

The animals always lie asleep close to the margin, and generally with their heads pointing away from the water. They are extremely watchful; and on being alarmed by the near approach of some boat gliding past or human beings walking along the bank, after contemplating the objects of their suspicion for a short space of time, they one after another awkwardly wheel round, and with a splash and a flounder speedily vanish beneath the surface of the water, to reappear again so soon as the cause of their alarm has passed.

Though hideous and repulsive in appearance, these reptiles nevertheless fulfil a most useful office as scavengers. In the neighbourhood of large towns on the banks of the Ganges, hundreds of dead bodies are daily cast into the holy river by the Hindus; and in a tropical climate like India, were it not for crocodiles, turtles, and vultures assembling and devouring the corpses, speedily some dreadful plague would break out and spread death around.

Judging from the accounts of travellers, the crocodiles inhabiting the African continent must be far more dangerous than their confères of Asia; for though we sometimes hear of muggers taking to man-eating, especially in Lower Bengal and parts of Assam, yet such practices are not the rule, as is generally supposed.

I have, however, seen patches of water near the foot of ghats or flights of steps fenced round with a close and strong hedge of bamboo stakes, driven firmly into the river-bed, for the purpose of protecting bathers or women drawing water from the assaults of man-eating crocodiles; and it is a dangerous practice at all times to bathe in pools frequented by such monsters. Cows, horses, sheep, goats, and dogs, besides the numerous wild inhabitants of the jungle, all form a prey of the mugger. The cunning animal, well acquainted with some spot where, towards sunset, flocks and herds, after the heat of the day has passed, are in the habit of drinking, there lies in wait concealed amid the sedge bordering the margin. Presently some unlucky victim in the shape of a poor bullock parched with thirst, comes hurrying down the bank and eagerly approaches the water; but hardly has its mouth reached the surface, when the blood-thirsty crocodile seizes it by the nose; and if once successful in

securing a firm grip, the chances are, that unless the herdsman is at hand to render assistance, the unfortunate bullock, in spite of struggling desperately to free itself, is soon dragged down on to its knees, and later beneath the surface of the pool.

It has been asserted that tigers are now have been seized, and after a hard fight, overpowered by the crocodile. Possibly this may occasionally happen; but I imagine such an occurrence to be extremely rare; and my impression is, that such redoubtable champions, each capable of inflicting severe punishment on his opponent, would avoid rather than risk coming to blows.

It is generally imagined that the plated coat of mail covering the crocodile's body renders the animal invulnerable to bullets. Such may have been the case in the days of brown-bess; but a spinning conical ball fired from a Martini-Henry or other grooved weapon of the present day, will not only readily pierce, but even pass completely through the body of the largest crocodile.

It is the extraordinary tenacity of life with which all the lizard family are endowed, that has in a great measure given rise to this notion of their invulnerability; for unless shot through the head, neck, heart, or such-like vital part, the crocodile, even when desperately wounded by a bullet through the body, will almost invariably gain the water, only shortly afterwards to sink dead to the bottom, to be devoured by some of its cannibal relations.

Near a station where I happened to be quartered for many years in Central India, there was a large lake where crocodiles were known yearly to breed. After some trouble, I procured two mugger's eggs from some fishermen who frequented the spot. They were of an oval shape, dirty white colour and rough surface. The female crocodile about the month of May, having scraped a hole with her feet in the sand or mud of some dry island, deposits her eggs therein, and carefully covers them up, leaving the heat of the sun to hatch out her progeny. Meanwhile she hovers about the spot, till at length the thin layer of sand covering the eggs upheaves, the young issue forth, and escorted by the mother, take to their natural element, the water.

J. H. B.

SHAMROCK LEAVES.

A WEDDING.

At Irish country weddings of the lower orders, the priest is paid by voluntary contributions of the wedding guests. The marriage is generally celebrated in the evening, and is followed, especially among the farming classes, by a grand festivity, to which his "Riverince" is always invited. After supper, when the hearts of the company are merry with corned beef and greens, round goose, ham, and whisky-punch, the hat goes round.

Honor Malone was the prettiest girl in the barony; and a lucky boy on his marriage day was the bridegroom; albeit on the occasion he looked very ill at ease in a stiff, shiny, brand-new, tight-fitting suit of wedding clothes. Lucky, for in addition to her good looks, the bride had fifty pounds to her fortune and three fine cows.

Very pretty and modest she looked seated beside the priest, blushing a great deal, and wincing not a little at his Reverence's somewhat broad jokes.

And most becoming was the 'white frock' in which she was attired; a many-skirted garment, resplendent with 'bow-knots' and trimmings of white satin ribbons.

'As good as new,' my lady's-maid at the Castle, from whom she had bought it, had assured her. 'Made by the grandest French dressmaker in all London, and worn at only a couple of balls; her young ladies were so cruel particular, and couldn't abide the suspicion of a crush or a soil on their gowns.'

In the midst of his jokes and his jollity (and with an eye to future dues, nowhere is a priest half so good-humoured as at a wedding), while apparently absorbed in attention to the pretty bride, whose health had just been drunk in a steaming tumbler, Father Murphy perceived with his business eye that preparations were being made for sending round the plate in his behalf.

The stir began at the end of the table where the 'sthrong farmers' mustered thickest. A goodly set they were, in their large heavy greatcoats of substantial frieze, coriutory knee-breeches, and bright blue stockings; their comely dames wearing the capacious blue or scarlet cloth cloak with silk-lined hood, which, like the greatcoat of the men, is an indispensable article in the gala toilet of their class, even in the dog-days.

In the midst of the group was Jim Ryan. Now this Jim Ryan was the sworn friend and adherent of Father Murphy; he would have gone through fire and water to serve his Reverence. He was rather a small man in the parish as regarded worldly goods, having neither snug holding nor dairy farm; but he was highly popular, being considered a 'dhrill boy' and good company.

When the proceedings of this devoted follower met the priest's business eye before alluded to, they caused considerable surprise to that intelligent organ, inasmuch as greatly to damage a very pretty compliment his Reverence was in the act of making to the bride.

First Jim Ryan took hold of the collecting plate, and seemed about to carry it round. Then, as if suddenly recollecting himself, he stopped short, and dashed it down on the table with a clatter and a bang that made Mrs Malone wince, for it was one of her best china set.

Jim's next proceeding was to try all his pockets. He dived into his waistcoat, breeches, and swallow-tailed coat receptacles, one after another, but without finding what he wanted. At last, after much hunting and shaking, and many grimaces of disappointment, he pounced on the object of his search, and drew carefully from some unknown depths a large tattered leather pocket-book.

By this time every one's attention was fixed upon him. Deliberately he opened the book, and peering inside—having first ascertained by a covert glance around that the company were observing—he extracted from it a bank-note. This, when unfolded, he spread out and flattened ostentatiously on the table, so that all who looked might read 'Ten Pounds' inscribed upon it!

A flutter of astonishment ran through the guests, not unminged with signs of dismay among the richer portion. Fat pocket-books that a few moments before were being pompously produced by their owners, were stealthily thrust back again. A sudden pause was followed by a great whispering and consulting among the farmers. Anxious and

meaning looks were bestowed on the latter by their wives, to say nothing of expressive nudges, and digs into conjugal ribs where practicable. For there was always much rivalry in these offerings. Mister Hennessey, who drove his family to mass every Sunday in his own jaunting car, would scorn to give less than Mister Welsh; though *he* too was a 'warm' man, and always got top price for his butter at Limerick market. And now to be outdone by Jim Ryan! To proffer his Reverence five pounds, when the likes of him was giving ten! It was not to be thought of! So the result, after Jim had deposited his note with a complacent flourish on the plate, and had gone his rounds with the latter, was the largest collection that had ever gladdened the heart or filled the pockets of Father Murphy.

As the priest was leaving the place, Jim came up to him and laid his hand on the horse's bridle: 'A good turn I done yer Riverince this night, didn't I? Such a mort of notes an' silver an' coppers I niver laid eyes on! I thought the plate would be bruk in two halves with the weight. An' now'—in a whisper, and looking round to see there was no one listening—'where's my tin pound note back for me!'

'Your ten pound note, man! What do you mean by asking for it? Is it to give you back part of my dues, you want?'

'Ah then now, Father Murphy dear, sure an' sure you niver was so innocent as to think that blessed note was mine! Where upon the face of the living earth would a poor boy like me get such a sight of money as that? 'Tin pounds! I borried it, yer Riverince, for a schaine; an' a mighty good an' profitable schaine it's turned out. Sure I knew the sight of it would draw the coin out of all their pockets; an' by the powers! so it did.' A fact his Reverence could not deny, while—not without interest—he refunded Jim's ingenious decoy-duck.

THE ITALIAN GRIST-TAX.

IN our own favoured realms millers have their troubles, no doubt, as well as other folk, but at anyrate they are not tormented with a *grist-tax*; and indeed in these enlightened days we should have thought that such an impost was unknown in all countries claiming to have attained a high degree of civilisation. Mr Edward Herries, C.B., late Her Majesty's Secretary of Legation at Rome, in the course of his elaborate Report on the Financial System of Italy, has, however, shewn us our mistake; and in tracing the history and present position of the tax, he furnishes us with some curious particulars respecting it.

As our readers will doubtless be struck with the anomaly of a powerful government having recourse nowadays to indirect taxation to augment its revenue, it may be well at the outset to cite a brief paragraph from Mr Herries' Report, in order to shew how it happened that the grist-tax came to be reimposed upon the people of Italy.

Towards the close of the year 1865, he writes, M. Sella, then Minister of Finance, having to meet a deficit estimated for 1866 at upwards of two hundred and sixty-one million lire (say ten million

four hundred and fifty thousand pounds), and being compelled, he said, to have recourse to indirect taxation for a large increase of revenue, urged upon the Chamber of Deputies the revival of the grist-tax, which he considered as fulfilling more completely than any other new impost that could be found the essential conditions of great productiveness, wide diffusion, and equal pressure on all parts of the kingdom.

The impost seems to have made its first appearance in Sicily, where it was a source of revenue during the Norman period, and there, no one was allowed to carry corn to be ground without first obtaining, after much delay, a permit, for which he had to pay the duty chargeable on the grinding of the corn. The attestation of the officer in charge of the mill was requisite for the removal of the flour, for which a certain *ronce* was prescribed, and which was always to be accompanied by the permit. The miller was not even allowed to keep the key of his own mill, and was prohibited from grinding corn between sunset and sunrise. The wants of the population, however, sometimes made it necessary to relax this rule; and in such cases the miller (whose family was never to remain in the mill with him) was securely locked and barred in for the night, without any means of communicating with the outer world, whatever might happen. This treatment, however, was at length seen to be cruel; and permission was granted to any miller exposed to imminent peril from fire, flood, or other calamity, to free himself from nocturnal incarceration by breaking (if he could) through the door, window, or roof. It does not seem to have been foreseen, Mr Herries aptly remarks, that such a gracious concession might be rendered nugatory by the strength of the barriers or the feebleness of the miller!

Up to 1842, the millers themselves were considered as responsible fiscal agents; but after that time, the supervision of every mill was intrusted to an official called a 'weigher' (*custode pesatore*); but not being usually a very faithful guardian, bribery soon became rampant. In the Ecclesiastical State, where the tax was farmed out to contractors, the mode of its exaction was in many respects similar to that existing in Sicily. By an edict of 1801, which deserves notice as a legislative curiosity, a miller was liable to be sent to the galleys, besides paying a heavy fine, for a variety of offences—such as that of grinding corn not regularly consigned to him in the manner prescribed; of receiving corn or sending out flour at night; and others of similar enormity. In the district of the *Agro Romano*, all bread had to be stamped; and the absence of the proper stamp exposed the guilty baker to a fine of one hundred scudi and corporal punishment, or even to slavery in the galleys. The inhabitants of this district were only allowed to use bread baked within it, and they might be compelled to declare where they got their bread.

Though the tax was temporarily abolished in its last strongholds in the year 1860, it was subsequently revived, until all the statutes relating to its subject were finally consolidated in 1874. The tax, which must now be paid to the miller at the time of grinding, is charged at the rate of two lire (of about tenpence each) per hundred kilograms on wheat; and one lira on maize, rye,

oats, and barley. The miller pays periodically to the collector of taxes a corresponding fixed charge for every hundred revolutions of the millstone, to be ascertained by an instrument called *contatore*, which is affixed to the shaft at the cost of the government. The amount of this charge is determined for every mill according to the quality and force of the machinery and the mode of grinding. The miller may refuse the rate as first calculated; in which case the revenue authorities have the power to employ an instrument which will record the weight or volume of the corn ground; or of collecting the tax directly by their own officers, or of farming the tax. Should they not think fit to exercise such powers, the rate is determined by experts. The impost, it is perhaps hardly necessary to say, is an eminently unpopular one, and was only consented to under the pressure of extreme necessity.

The great difficulty in the way of the smooth working of the grist-tax was the impossibility of procuring the mechanical means of control contemplated by the law; and in point of fact, when it came into operation no effective instrument was in existence. By the end of August 1871, however, matters had changed, and no fewer than 78,250 registering instruments were supplied, and by 1874 the greater number of these *contatori* were in active operation. The *contatore*, however, does not give universal satisfaction; and Mr Herries thinks that what is wanted to remove doubts as to fair treatment, is some instrument capable of recording the weight or the quantity of wheat ground. Best of all would be the abolition of the grist-tax; but in a country where the mass of the people consume no articles of luxury which can be taxed by revenue officers, and also from whom no direct impost could be exacted, the continuation of the grist-tax seems to be an absolute necessity.

SWEET LOVE AND I.

Sweet Love and I have strangers been
These many years,

So many years.

He came to me when Life was green

And free from fears,

These present fears.

He came, and for a little space

My life was gladdened by his grace;

But soon he fled, and joy gave place

To grief and tears.

'O Love, come to me once again!'

My lone heart sighs,

So sadly sighs.

'Recall thy fearless nature, then,

Sweet Love replies,

Softly replies.

'Thou canst not? Then I cannot be

The same that once I was to thee.

There's no room in the heart for me,

Where fears arise.'

A. C. S.

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TOYS.

OF British industries, not the least interesting to a large world of readers, great and small, will be found the manufacture of toys. Mr Bartley, in treating this subject in Mr Stanford's useful series of Handbooks to British Manufactures, rightly assumes that objects which are so inseparably connected with the happiness of our early life cannot be held unimportant; while we need but mention the name of Charles Dickens, in order to lend a charm to the avocations of a doll's dress-maker and a journeyman toy-maker. Although the English productions are almost entirely confined to a few special types of goods, which not only hold their own among foreign rivals, but are largely exported to the continent, we find that in London alone there are, besides various importers of toys, eleven rocking-horse manufacturers, ten wholesale dealers, and one hundred and fifty-one retail dealers, not including the large tribe of small retailers, who combine other occupations with the sale of toys. Though Germany, Switzerland, and France are the great storerooms of all toys of which the material is soft wood, the toy manufacture of London forms a large and interesting industry.

Penny wooden toys are turned out of a manufacturing establishment which consists of a toy-maker, his wife, and family. When the father has finished his work on the lathe, the mother and children have each their particular share in gluing, pasting, and painting. The material for these articles are scraps of timber bought out of builders' yards, the principal tools being the chisel and the lathe. Pewter toys are made in London in very large quantities. At one establishment a ton of metal is consumed each month in the production of Lilliputian tea, coffee, and dinner sets. English taste may be gathered from the fact, that the number of tea-sets made is nearly thirty times larger than either of the other two. Twenty-three separate articles make up a set, and of these articles two millions and a half are made yearly by one house alone. The metal is provided from miscellaneous

goods, such as old candlesticks, tea-pots, pots and pans, bought from 'marine' store-dealers by the hundredweight; and when melted, is formed into the required shapes by different processes of casting in moulds. One girl can make two thousand five hundred small tea-cups in a day. Putting together the four separate pieces of a mould made of hard gun-metal, she fills it with the molten metal, dips its mouth into cold water, takes it to pieces, and turns out a cup that only wants trimming.

Under the head of paper toys, miniature packs of cards demand a large amount of material and labour. It is astonishing to read that one firm alone in London turns out each year *one million* packs of toy cards, using five or six tons of paper for the purpose, on each sheet of which are printed three packs in black and red. When these sheets have been pasted on cards—called 'middlings'—one girl can cut up and complete eight hundred and sixty-four packs each day, earning about one pound a week. These cards are sold at twopence, one penny, and a halfpenny a pack. The penny cards have, as might be expected, far the largest sale with the public; the manufacturer getting five shillings for a gross of twelve dozen, or somewhat less than half the retail price. Many thousand gross of these little packs go to all parts of the world. The twopenny packs are precisely the same as the penny packs, with the addition of an ornamental paper back to each card. The demand for these superior packs is small, for when the price of an article gets above a penny, we read that it at once shuts it out from a certain class of the buying public. The purchaser that will spend more than a penny will spend sixpence. The spending public, it seems, go in sets. There is the farthing set, mostly children, who patronise small shops of toys and sweets; there is the halfpenny set; and the penny set. We then jump to the sixpenny set. There is a very large manufacture of toy picture-books which are sold at one penny, a halfpenny, and a farthing. Even the farthing books have a picture on the cover printed in four colours; and valentines

four hundred and fifty thousand pounds), and being compelled, he said, to have recourse to indirect taxation for a large increase of revenue, urged upon the Chamber of Deputies the revival of the grist-tax, which he considered as fulfilling more completely than any other new impost that could be found the essential conditions of great productiveness, wide diffusion, and equal pressure on all parts of the kingdom.

The impost seems to have made its first appearance in Sicily, where it was a source of revenue during the Norman period, and there, no one was allowed to carry corn to be ground without first obtaining, after much delay, a permit, for which he had to pay the duty chargeable on the grinding of the corn. The attestation of the officer in charge of the mill was requisite for the removal of the flour, for which a certain *ronte* was prescribed, and which was always to be accompanied by the permit. The miller was not even allowed to keep the key of his own mill, and was prohibited from grinding corn between sunset and sunrise. The wants of the population, however, sometimes made it necessary to relax this rule; and in such cases the miller (whose family was never to remain in the mill with him) was securely locked and barred in for the night, without any means of communicating with the outer world, whatever might happen. This treatment, however, was at length seen to be cruel; and permission was granted to any miller exposed to imminent peril from fire, flood, or other calamity, to free himself from nocturnal incarceration by breaking (if he could) through the door, window, or roof. It does not seem to have been foreseen, Mr Herries aptly remarks, that such a gracious concession might be rendered nugatory by the strength of the barriers or the feebleness of the miller!

Up to 1842, the millers themselves were considered as responsible fiscal agents; but after that time, the supervision of every mill was intrusted to an official called a 'weigher' (*custode pesatore*); but not being usually a very faithful guardian, bribery soon became rampant. In the Ecclesiastical State, where the tax was farmed out to contractors, the mode of its exaction was in many respects similar to that existing in Sicily. By an edict of 1801, which deserves notice as a legislative curiosity, a miller was liable to be sent to the galleys, besides paying a heavy fine, for a variety of offences—such as that of grinding corn not regularly consigned to him in the manner prescribed; of receiving corn or sending out flour at night; and others of similar enormity. In the district of the Agro Romano, all bread had to be stamped; and the absence of the proper stamp exposed the guilty baker to a fine of one hundred scudi and corporal punishment, or even to slavery in the galleys. The inhabitants of this district were only allowed to use bread baked within it, and they might be compelled to declare where they got their bread.

Though the tax was temporarily abolished in its last strongholds in the year 1860, it was subsequently revived, until all the statutes relating to the subject were finally consolidated in 1874. The tax, which must now be paid to the miller at the time of grinding, is charged at the rate of two lire (of about pence each) per hundred kilograms on wheat; and one lira on maize, rye,

oats, and barley. The miller pays periodically to the collector of taxes a corresponding fixed charge for every hundred revolutions of the millstone, to be ascertained by an instrument called *contatore*, which is affixed to the shaft at the cost of the government. The amount of this charge is determined for every mill according to the quality and force of the machinery and the mode of grinding. The miller may refuse the rate as first calculated; in which case the revenue authorities have the power to employ an instrument which will record the weight or volume of the corn ground; or of collecting the tax directly by their own officers, or of farming the tax. Should they not think fit to exercise such powers, the rate is determined by experts. The impost, it is perhaps hardly necessary to say, is an eminently unpopular one, and was only consented to under the pressure of extreme necessity.

The great difficulty in the way of the smooth working of the grist-tax was the impossibility of procuring the mechanical means of control contemplated by the law; and in point of fact, when it came into operation no effective instrument was in existence. By the end of August 1871, however, matters had changed, and no fewer than 78,250 registering instruments were supplied, and by 1874 the greater number of these *contatori* were in active operation. The *contatore*, however, does not give universal satisfaction; and Mr Herries thinks that what is wanted to remove doubts as to fair treatment, is some instrument capable of recording the weight or the quantity of wheat ground. Best of all would be the abolition of the grist-tax; but in a country where the mass of the people consume no articles of luxury which can be taxed by revenue officers, and also from whom no direct impost could be exacted, the continuation of the grist-tax seems to be an absolute necessity.

SWEET LOVE AND I.

SWEET Love and I have strangers been
These many years,

So many years,
He came to me when Life was green
And free from fears,
These present fears.

He came, and for a little space
My life was gladdened by his grace;
But soon he fled, and joy gave place
To grief and tears.

'O Love, come to me once again!
My lone heart sighs,

So sadly sighs.
'Recall thy fearless nature, then,
Sweet Love replies,
Softly replies.

'Thou canst not? Then I cannot be
The same that once I was to thee.
There's no room in the heart for me,
Where fears arise.'

A. C. S.

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TOYS.

OF British industries, not the least interesting to a large world of readers, great and small, will be found the manufacture of toys. Mr Bartley, in treating this subject in Mr Stanford's useful series of Handbooks to British Manufactures, rightly assumes that objects which are so inseparably connected with the happiness of our early life cannot be held unimportant; while we need but mention the name of Charles Dickens, in order to lend a charm to the avocations of a doll's dress-maker and a journeyman toy-maker. Although the English productions are almost entirely confined to a few special types of goods, which not only hold their own among foreign rivals, but are largely exported to the continent, we find that in London alone there are, besides various importers of toys, eleven rocking-horse manufacturers, ten wholesale dealers, and one hundred and fifty-one retail dealers, not including the large tribe of small retailers, who combine other occupations with the sale of toys. Though Germany, Switzerland, and France are the great storehouses of all toys of which the material is soft wood, the toy manufacture of London forms a large and interesting industry.

Penny wooden toys are turned out of a manufacturing establishment which consists of a toy-maker, his wife, and family. When the father has finished his work on the lathe, the mother and children have each their particular share in gluing, pasting, and painting. The material for these articles are scraps of timber bought out of builders' yards, the principal tools being the chisel and the lathe. Pewter toys are made in London in very large quantities. At one establishment a ton of metal is consumed each month in the production of Lilliputian tea, coffee, and dinner sets. English taste may be gathered from the fact, that the number of tea-sets made is nearly thirty times larger than either of the other two. Twenty-three separate articles make up a set, and of these articles two millions and a half are made yearly by one house alone. The metal is provided from miscellaneous

goods, such as old candlesticks, tea-pots, pots and pans, bought from 'marine' store-dealers by the hundredweight; and when melted, is formed into the required shapes by different processes of casting in moulds. One girl can make two thousand five hundred small tea-cups in a day. Putting together the four separate pieces of a mould made of hard gun-metal, she fills it with the molten metal, dips its mouth into cold water, takes it to pieces, and turns out a cup that only wants trimming.

Under the head of paper toys, miniature packs of cards demand a large amount of material and labour. It is astonishing to read that one firm alone in London turns out each year *one million* packs of toy cards, using five or six tons of paper for the purpose, on each sheet of which are printed three packs in black and red. When these sheets have been pasted on cards—called 'middlings'—one girl can cut up and complete eight hundred and sixty-four packs each day, earning about one pound a week. These cards are sold at twopenny, one penny, and a halfpenny a pack. The penny cards have, as might be expected, far the largest sale with the public; the manufacturer getting five shillings for a gross of twelve dozen, or somewhat less than half the retail price. Many thousand gross of these little packs go to all parts of the world. The twopenny packs are precisely the same as the penny packs, with the addition of an ornamental paper back to each card. The demand for these superior packs is small, for when the price of an article gets above a penny, we read that it at once shuts it out from a certain class of the buying public. The purchaser that will spend more than a penny will spend sixpence. The spending public, it seems, go in sets. There is the farthing set, mostly children, who patronise small shops of toys and sweets; there is the halfpenny set; and the penny set. We then jump to the sixpenny set. There is a very large manufacture of toy picture-books which are sold at one penny, a halfpenny, and a farthing. Even the farthing books have a picture on the cover printed in four colours; and valentines

printed from wood-blocks and hand-painted can be sold for a halfpenny.

Another large industry grown up or developed of late years is the manufacture of india-rubber toys. The india-rubber, cut up into small pieces, and formed, by the admixture of white-lead and other substances, into sheets of a putty-like inelastic material, is fitted into two pieces of an iron mould, variously shaped according to the requirements of the toy, and then plunged into the vulcanising bath—a vessel filled with sulphur and other ingredients. When taken out, the india-rubber has become elastic, the two pieces of mould are unscrewed, and the toy, after trimming and painting, is ready for use.

Toy-boats, which in their construction go through fifteen different hands, are very cheap, though the whole of the work is done by hand. In one London manufactory as many as ten thousand sailing-boats are made every year; upwards of five hundred twelve-foot lengths of three-inch deals being used in their manufacture, and eight tons of lead being required for their keels.

We have left to the last place notice of the toy which is the speciality of English toy-makers, the wax-doll. The wax, after being melted in large vessels by means of boiling water, is poured into hollow plaster-moulds made in three pieces, and laid in rows with the crown of the head downwards. When the workman has filled from a can ten or twelve of these moulds, returning to the first one in the row, he pours back into his can as much of the wax as remains fluid; and so on with the other moulds. Most of the wax is thus poured back again into the can; but that which adheres to the mould has now become a hollow wax head, thick or thin according to the time which elapses between pouring the wax into the mould and pouring it out again. Then comes the process of fixing the glass eyes, which, save the very best, are now made abroad, the Germans having driven the Birmingham manufacturers out of the field. The wax ridges left by the joints of the mould are smoothed down, the surface is brushed over with turpentine to clean it, and with violet powder to beautify it; and when the cheeks have been tinted with rouge and the lips with vermillion, the head is ready for the hair-dressing operations. For the best dolls, the wig is made by a lengthy process of fixing one or two hairs at a time, so as to give a natural appearance to the hair. In the common dolls, the hair is more quickly put on in locks. The black hair, most of which comes from abroad, is human; but the favourite flaxen curls are of mohair, the silky wool of the Angora goat. *Composition* dolls' heads are made of pasteboard from iron moulds. The pasteboard is placed over a mould representing half a head cut vertically behind the ear, and is then forced by means of a pestle into every crevice. Another mould for the other half of the head is similarly filled; and when nearly dry, the two halves are removed from the moulds and pasted together. The head thus

moulded, which becomes as hard as leather, is coated with a composition of size and whiting, washed with oil and turpentine; and then having received a pair of eyes, is dipped into a vessel of melted wax, and re-dipped until it looks like a solid wax-head. The wax is then cut from off the eyes, and scraped from the part of the head which the hair will cover; and the head is then ready for painting, powdering, and hair-dressing. A third class of dolls, known in the trade by the misnomer of 'rag dolls,' is the pretty muslin-faced creature with blue eyes and becoming cap. Her face is of wax, covered with an outer skin of muslin, and is made by pressing a wax mask, moulded in the ordinary way, into a mould exactly like the one in which the wax was cast, over which is stretched a piece of thin muslin. In this way the wax necessarily adheres so closely to the muslin, that it becomes a sort of skin to the mask. These faces are nothing but masks, and require the caps to conceal the junction with the skulls, made of calico and sawdust, like the bodies. The bodies are mostly the handiwork of women and the smaller members of the doll-maker's family. The doll manufacturer gives out so many yards of calico which are to produce so many bodies, the sawdust to be found by the maker. Then by a division of labour in cutting out, sewing up, filling with sawdust, and making the joints, many dozen bodies will be turned out by one family in a week. The arms are a branch of the trade upon which certain persons are almost exclusively employed. They are made of calico above the elbow, of leather for the part below, and are paid for at the incredibly small price of sixpence-halfpenny a dozen pairs; smaller arms for very cheap dolls costing three-halfpence a dozen pairs. We read that the hands, which thus cost each the sixteenth part of a penny, have always a certain number of fingers! The materials are found by the makers themselves; so when we consider that each doll sold to the public for sixpence should not cost more than threepence in the making, if the toy-merchant and the retailer are to earn a living, there remains but a pittance to be earned by the Caled Plummers and Jenny Wrens. Though most dolls leave their first homes in an undressed condition, the larger establishments employ many young women in the dress-making department of their trade. One article of dolls' attire forms a distinct branch of trade—the little many-coloured leather shoes, which are made from the waste material left by the makers of children's ornamental boots and shoes. A thousand such pairs are made weekly by one large manufactory in Clerkenwell.

And now we replace our puppets in their box, grateful for having been let into some of the mysteries of their creation, not only the more ready to admire the charming little picture of the toy-maker, by John Leech, in the *Cricketer* on the *Hearth*, but more sensible of a sympathy with doll-nature, and more certain that toys are as much needed for old as for young. Happy is it if the

toys of grown-up folks cause as little mischief and as much pleasure as the innocent toys of childhood!

FROM DAWN TO SUNSET.

PART II.

CHAPTER THE THIRTEENTH.

WHEN Deborah awaked, old Marjory was sitting watching over her; the sun was still glorious on the woods outside, but the chamber was left in grateful gloom. She could not even distinguish her father's picture; but soon, clear and distinct through the gloom, laughed out the boyish face of Charlie. Charlie? What had Charlie done? Mute and still, Deborah looked up at her old nurse, while the darkness of reality dawned on her waking mind.

"Thou'rt ill, child," said old Marjory abruptly. "What makes you think so, dame?" asked Deborah faintly.

"Why, thy face betrays thee; it is white as my apron, and thine was a sleep o' sorrow. I know it. Thou'rt at sunset now, an' no more o' these airs!"

"Have ye no letter or message for me, Marjory? What are you hiding there?" and Deborah raised herself in feverish excitement.

"Why, it's a letter that'll keep, I warrant me, my Lady Deb. It's from the old man at Lincoln."

"Give it me, Marjory, and leave me, dear old dame. I wish to be alone."

So Marjory left her; but soon the old woman was knocking at the door again with food and wine for Deborah. She found her sitting on the floor white as a ghost. "O child, thou'rt faintin' for good victuals! There! eat and drink like a Christian. Why, bless thee, Lady Deb, dear, I know the master's in his ill quandaries. But don't take on, my Rose!"

"Dame, come and comfort me. Pray, take that food away! Let me lay my head on thy kind old breast. Thou'rt a mother to me, Marjory—always wert. Dame, I've no dear mother!"

The dame took her darning in her arms, and rocked her gently to and fro, with the toil-hardened old hand stroking the girl's silken hair, and her grave old face laid against it.

"No; thou hast no mother, poor lamb; worse for thee."

"It's hard to know right from wrong, Marjory; but I am quick to decide, and once decided, never falter. I try to do all for the best."

"I know it, I know it. But child, my Lady Deb, have no dealin' with that old man Master Sinclair. He's a demon!"

"Hush! or give the demon his due, Marjory. He has been kind to my brother Charlie."

"For what? We all know it; all Enderby knows what he's after."

"That is no concern of Enderby's. I hate this gossip. Look you, dame, if I choose to wed fifty such, it is no concern of Enderby's. If I did wed Master Sinclair, it would be of mine own free will: let all the world know that!"

"But thou'lt never wed him, dearie!" cried the old nurse, in tremulous breathless haste.

"I do not answer you Yes or No; but I am my own mistress."

"Too much so—ever too much so," muttered Marjory below her breath.

"What say'st thou, Marjory?"

"That thou wantest a strong kind hand over thee, bein' too headstrong by half. I wish Master King was here; he'd advise thee!"

"Best not," said Deborah, with a quick breath of pain. "Let 'Master King' attend to his own affairs. Each one has his troubles. Nurse, love me! I have need of it. O that I wore a little tiny child again, when, in affliction or in distress, I wrapped these arms o' thine about me; and they would seem to shelter me from all the world! O that thou wert magician, fairy, to give me my childhood back! I was happy then."

"An' not now? What ails my bright bird? Is it Master Charlie?"

"O Marjory, don't speak of that. Look you at his picture; look there! Could those fearless eyes ever turn aside in shame or dread? Would Charlie, with all his faults, ever bring dishonour on us? Tell me that?"

"No, *never*!" The old face turned white, but did not flinch; Marjory believed in the honour of her wild boy, as in her own soul.

"Ah, Marjory, nurse, my darling! How I do love thee! No; never believe that any but a black liar would ever accuse Charlie Fleming of a mean low act. Wild, reckless he may be, but dishonourable, never! Ah, my love, my comfort, our true and faithful friend, *see* believe in Charlie Fleming!"

"Where is my boy?" asked the old woman, with troubled tears in her eyes. "Why don't he come to Enderby? They *will* say strange things o' him if he don't come home. Oh, he'll break his father's heart by bein' so wild; but it's his father's blood that's in him."

"And his mother's too, for they say our sweet mother was a mad, *naught* dame, who was she? What was my mother's name?"

The girl gazed straight at the old woman till Marjory's eyes fell, and the girl's fair face was flushed with crimson. "I have never asked you," she said, "not since I was a child; but who was my mother, dame? Prithee, tell me. Ah, say not that there was shame! Poor and honest, I care not; but naught of *shame*!"

"No, my Lady Deb, no; naught o' shame. She was the child o' wedded parents, I promise thee; she was lawful wedded wife, thy mother; but if I was to tell thee who she was, Sir Vincent would strike me dead. I cannot tell thee; there's my faithful promise given, not."

"I will not ask ye then. One day I will—must know. Does Charlie know?"

"N'er from me or his father. But no one knows what Master Charlie knows."

"There's my father calling me; I must go. Good-bye, dame. Pray for me!"

Deborah went down into the hall. Sir Vincent got up and met her. He shut the door carefully, and led her to a chair; he sat down opposite her, and screening his face from the light with one great sinewy hand, gazed out from under its shadow, as if he would read his daughter's soul. For her part, she gazed at him with all her great and tender soul in her eyes, her own despair forgotten in her father's. There was a long silence between them, each gazing on the other, sorrow-stricken and speechless.

"Father," said Deborah softly then, "sweet father, have I not done thee some good? See! here's the letter from Lincoln; and in three weeks I shall be

Master Sinclair's wife. It is my duty, father, my free choice. My heart is very strong. Sweet father, thou'rt sad still, ay, even heart-broken; I know thy face so well! I have saved Charlie. Listen! This Master Sinclair puts everything in my power, makes me absolute mistress of all he has. My first act will be to save us from ruin; Charlie from ruin too. But tell me what more there is? What serpent has wronged Charlie falsely? ay, *falsely*, for before heaven, father, I would *swear* that Charlie has done no dishonour! Sooner would I doubt my own soul than his. He is incapable of double-dealing, incapable of all meanness and dishonesty. To doubt him, to believe for one moment that he could act dishonourably, is to believe that Charlie Fleming is no son of thine and mother's; that this Charlie Fleming is not the boy who has grown up under thine eyes and mine; graceless, truly, but the very soul of honour. Even the masters at his school, his tutors, his comrades who knew him best, have done him justice in calling him honourable and true. Then doubt him not for one moment!

Under the fire and sweetness of her faith in her brother, Sir Vincent waxed wan, and his fierce eyes grew dim with sadness.

Laying one hand upon her hands, and shading his own face still, he whispered brokenly: 'Believe on—hope on. Sweet child, sweet Deb, my brave best one, I *must* confide in thee, or my old heart will break. This boy—this son, in whom I trusted—Ah me!—and with his clenched hand on his brow and his eyes raised to heaven, the father gave a deep and bitter sob—'has *betrayed* me—his father!' With a strange hoarse eager whisper, and eyes that gleamed like a madman's, Sir Vincent leaned forward and uttered those words to Deborah. She, white, still, waited without a word for more. 'I have seen the papers—Adam Sinclair holds them—by which that boy of mine has anticipated my death, and raised money upon Enderby; his writing—his name—Charles Stuart Fleming. Adam Sinclair has got those papers out of Parry's hands; and by marrying thee, my fairest and my best, he buys those papers of Parry and destroys their shameful purport. But Deb—does that wipe out the stain? Does that blot out the fact that that boy of mine, deceiving and betraying me—ay, cursing my lengthened life, and hungering for the old man's death—has got a hound to raise this money? Ay, that hound has in turn betrayed him into Sinclair's hands; and Charles Fleming's black-heartedness is laid bare to him and me.'

'Have ye seen those papers, father, with your very eyes? And Charlie's writing?'

'Ay, ay.'

Deborah panted, terribly white and wild she looked, with her hands pressed on her side. Sir Vincent kneeled down beside her and laid his head upon her shoulder. Bitter, bitter was that hour.

CHAPTER THE FOURTEENTH.

Some days after that—it might have been centuries to Deborah Fleming—she heard a peal at the great hall bell; and Kingston Fleming, pale, disordered in dress, and haggard-eyed, entered the library. Deborah was looking idly over the books, not reading; she was stunned, and could neither

read nor write; she scarcely had the power of thought. One look at King, and she knew that he knew her fate. 'Deborah!' he said, roughly and hoarsely, 'you have played me *false*! By words strong and binding as an oath, you told your brother you would not wed Adam Sinclair—that no ruin, no misery, should lead you to so ignoble a sacrifice. Is it then under the mask of doing good, ye do this grievous evil? Soiling your soul, sacrificing your life, not to save your father and your brother, for Charles Fleming would rather see you dead than accept your bounty *then*, but to win rank and money—to shuffle off this miserable coil of poverty, that wearies you; and to sell yourself for gold and tinsel to this hoary reprobate! No good intention, no amount of self-sacrifice, could justify so detestable a deed.'

Palely beautiful, but full of calm scorn, Deborah Fleming faced her fiery and impetuous kinsman; before she spoke, her haughty eyes flashed fire and disdain.

'Kingston Fleming, are *you* my brother? Are *you* my guardian, my master, or the master of this house, that you dare to insult me thus? What earthly right have you to question or to jeer at me? Were I a man, I would strike you on the face for this. Coward! Because I am alone and a woman, you dare to insult me by these words! What if I choose to be wed to Adam Sinclair, and to love his "gold and tinsel;" what is that to you? What if I choose to "sell" my precious self for his name and fortune; what is that to you? I have my father's consent; I am under my father's protection; you have no earthly claim on me. Fair and friendly have you ever been to me. Courteous has been your kindly interest in me from childhood upwards; but scarcely enough so, to justify your interference now. I thank you, Master Kingston Fleming, for your anxiety on my account; but I'll thank you also to leave me and mine alone.'

Even in that wild moment, Kingston saw that she was trembling with fierce passion—ay, she could have struck him; in that moment, she *hated* him. But Kingston too, goaded by his wild unavailing remorse and love, mad with the knowledge of how cruelly his taunt had wronged her, desperate at her beauty and her sacrifice, cared for nothing. Dashing down his hat and whip, he caught her hands in his: 'Beautiful, cruel, heartless, reckless Deborah! Child, I have loved thee—too late, too late. I am *free*! I am free to woo thee; I am a free man now! But when I come in mad haste to ask thy love and pity, I find thee betrothed, and cast away, and *sold*! Listen! I would have *made* thee love me. No woman on earth has I loved but Deborah Fleming! I would have *made* thee love me!'

Then, with a sharp bitter cry, Deborah wrenched away her hands. Conscious of her brother's dishonour, sublime in the greatness of her sacrifice, and her terrible secret and her suffering, she looked back on Kingston only with passion and scorn, to hide the love that would still master her, and hurled him back taunt for taunt. 'Ah! you are a good one to preach honour and good faith to me! throwing over one woman to woo another who is betrothed! I feel dishonoured even to have heard your words of love, when I have plighted troth to Adam Sinclair. But don't think to win or move me by thy treachery. Deborah

Fleming doesn't change her troth-plight every hour. Her vows once made, are binding, binding till death!

'Then good-bye, Deborah.' He took up his hat and whip and strode to the door. His looks were turned back on her, a smile was in his haggard eyes—intense passion, love, and suffering; his face was pale as death. His last sight of her was the proud erectness of her figure, and the bright watchfulness of her beautiful haughty eyes, following him, and burning on him. But when he was gone from her sight, the bells of Enderby, as all through their interview, came clanging wildly out, clashing on heart and brain.

'I know not if I love or hate him most!' cried the girl, half mad with her despair. 'I love him, and I hate him too!'

Then rang out the bells of Enderby, loud and clear, the refrain, 'I love him, and I hate him too!' Low in the lull, loud and clear on the gale, 'I love him, and I hate him too!'

Mistress Dinnage in those days was well-nigh desperate. After hearing that Deborah Fleming was betrothed to Adam Sinclair and was to be wedded to him in three weeks' time, she knew no rest. It was all for Charlie, it was on his account; Charlie therefore must know of this, and there would be an end of it. For two evenings Mistress Dinnage watched for her lover in vain. She had talked herself hoarse to Deborah; she had exhausted threats and entreaties; she might as well have talked to the idle wind—and so she knew—as to Deborah once resolved. On the third evening-watch, however, Margaret saw the well-known form. She was out in a moment under the gloom of the trees and the twilight.

I have somewhat to tell you, Charlie. Let me speak quickly and clearly, love. Your sister Deborah is betrothed to Master Sinclair; they are to be wedded in two weeks and four days. There have been sad doings at Enderby. Your father! Ah! I dare not tell you what I fear. But oh! grievous trouble has he been in through tidings from Master Sinclair about you! So Mistress Deborah promised them and there to be Master Sinclair's wife. Oh, I tell you she is desperate since! She loves another; I know it; but she gives up all for you and Enderby.

'Can this be true! Meg, I will kill him first. Has he betrayed me then? What tidings has he sent?'

'I know not; but of terrible losses, be sure. Ah, dear, are ye not in terrible trouble, and waiting about for love of me? Stay no longer, Charlie! Think not of me; I will follow; I've got good courage. Release sweet Mistress Deborah.'

'How, quotha? Death only will release that mad reckless girl. Ah! I might have known her.'

'Neither prayers nor commands, Charlie, would she listen to; no, not if you were rolling in riches now, she says she would not break her oath, Charlie! O love, what do I urge you to! You must fight that old man, and we must fly. Not to kill him, Charlie, hark ye!—not to kill him; but to disable him for what life he has left! Think me merciless, unwomanly; I care not, so that it saves her. Or stay, stay, Charlie! Will ye use all your influence first to turn him? O ye can talk to tenderness a heart o' stone! Talk to Adam Sinclair then till he melts to pity; but set sweet Deborah free!'

'Talk to him!' said Charlie Fleming, with a short laugh; 'ay, I will talk. But we have old accounts to settle first, old debts to square. We have a little affair to settle between ourselves, Adam Sinclair and I. Hark ye, Meg! He has accused me of foul play—not to my face, not he! but behind my back. He has accused me of cheating at cards—a dirty trick to brand on a man; and as ye know, love, whatever Charlie Fleming's faults, he would scorn so foul an act. I don't mind telling ye now, Meg, that I must wipe off this slander with blood. All my comrades are up in arms at it; and even now I am on my way to Lincoln, to meet Adam Sinclair face to face; and in case I fall, Meg—to bid thee now farewell. He took her in his arms; he folded back the long dark hair from the passionate face. In bitter wrath and passion had she trembled at hearing of the foul slander put on his fair fame; and her fiery spirit, following the spirit of his words, had made her grasp his hands, and pant and frown in eagerness for revenge. But when she pictured him dead—lying perchance beneath the old man's deadly shot, stiffening in his blood, in the perished glory of his youth and strength—then her woman's heart began to shudder and to faint: she leaned on his broad breast and moaned.

'What! sick?' he whispered. 'Faint! A little *pollroom*! The wife of a Fleming must be brave. *Thou* wouldst hate and despise Charles Fleming if he could for one moment brook such an insult as this. Come; I meant to bid thee good-bye, and hide this from thee; but now I have told thee all, thou must face death with me, and take it as it comes.'

'I know it! I know it! Not for one moment would I say aught but "Go!" Yet, pity my woman's fears; think how long I have loved but thee! Ay, I have kissed the stones where thy shadow passed! and to lose thee now, *now*—my husband of but a week, my darling husband! Nay; I will not grieve before 'tis time!' she cried with sudden fire, *gazing up at him*. 'See! I am so brave that I would fain be thy second, and see thy true shot speed to that old coward heart! Oh, thou'lt kill him, Charlie, thou'lt kill him, or hurt him sorely. A dead-shot he may be; but men say thine is deadlier. Nay; do not laugh; I have listened, till I know better than thou canst know thyself, all Charles Fleming's brave gifts. They say thou'rt a deadly shot.'

He stooped and kissed her. 'A deadly shot! Yes; I will shoot him for love of thee. Better not mangle the old traitor; I will kill him clean, or not at all. Thank heaven, if he kills me it will be clean! Love, if I fall, don't weep; I leave a *hope with thee*.' These words were whispered; she did not answer, she did not speak.

A few more happy stolen hours, and he was gone. She went with him to the gate in the woods, where he was wont to come and go, through the mossed entrance and the tangled clambering ivy. There they stood, her hand upon the gate; her dark head, that reached no higher than his heart, laid there. The mute clinging hand did not escape him; every motion, every gesture of his young love, was marked by his keen hawk eyes, as if it were her last. He pulled open the stubborn gate; still the two clung as if they would never part.

'Sweet love, good-bye.' He listened for her

answer, but only heard a sob; kisses were Margaret's good-bye—kisses, and the deathless love within them. Then her arms fell asunder, and leaning against the gate, she let him go. With the iron grasped within her little hands, she stood gazing through the bars and saw him wave adieu; still stood, while the quick hoofs bore him far away; still stood, gazing for him through the night, though Mistress Margaret Fleming (for Mistress Fleming indeed she was) saw him no more!

COD-FISHING IN ICELAND.

THOUGH the French are not naturally a maritime nation, there is a hardy race of fishermen to be found on the coasts of Normandy and Brittany, from whose ranks are obtained a large proportion of the hands that are employed in the cod-fishing of Newfoundland and Iceland. Though it is a painful and dangerous occupation, there are few that offer a higher remuneration to the masters and crews; the shoals of fish are inexhaustible, and the demand is always greater than the supply.

It is, however, not always easy to get up the necessary complement of hands; and captains sometimes have recourse to the unlawful acts of the press-gang of former days. A ship ready to start will enter a little creek on the coast of Brittany near an almost unknown village; and after mass on Sunday, the captain announces at the church door that he is in want of men for Iceland. The advantages are loudly proclaimed: good food, good wine, brandy, meat three times a week, and above all, an immediate bounty of from four to eight pounds, with future pay in proportion to the results. The extreme poverty of the peasants makes such a sum of money seem fabulous; they have only to say Yes. And yet, how hard it is to them to leave their beloved home and speak the fatal word! The captain knows how to overcome their irresolution. Installed in a neighbouring *cabaret*, he patiently waits until some young and vigorous men enter, when he pours forth all his eloquence, enumerates the advantages, slurs over the danger and fatigue, shakes the gold in his purse, orders an abundance of cider and brandy, and in the end, draws his victims into the net.

The engagement is signed; and the labourer, who has spent the winter in collecting sea-weed for the fields and sowing his crops, leaves the women to manage the rest. All being favourable, he will return in September with twenty pounds in his pocket. A few voyages make him a good sailor, when he can be drafted into the fleet at Cherbourg, thence to be transformed into a servant of his country.

From the difficulty of obtaining men, French shipbuilders reduce the labour by mechanical appliances; so that five or six men will navigate ships of two hundred tons. But in cod-fishing craft it is necessary to have as many men as possible, and twenty are usually taken. The arrangements are woefully insufficient. There are only sleeping-places for a third; one sailor resting whilst two are fishing. Thus, after six hours spent on deck without shelter from rain, wind, and snow,

the waves washing over and the heavy line in their hands, the men go down stiff with cold and worn out with fatigue. Yet they must lie dressed as they are, on a hard damp mattress; and frequently the clothes are never changed from the beginning to the end of the voyage.

After five voyages a man is authorised to take the command, and though styled captain, he is nothing more than the head of the fishermen. It is his work to keep the account of the number of cod caught; the sailors taking care as they hook a fish to cut out its tongue and place it in a bag hung to their belt. When the hour of repose comes the tongues are taken to the captain, and about ten centimes is allowed for each. The second in office is only chosen as being the most skilful with his line; then comes the man who cuts off the cods' heads, opens and prepares the fish for the salter; and lastly the one who lays them in the barrels and closes them for sale.

With this short description of the crew we will pass over the voyage, as described by a French writer, M. Aragon, and take the reader to the Icelandic coast, Patxi-Fiord, where a number of vessels are already collected. Deserted during the past season, it now presents a scene of the greatest animation. A man-of-war is there to provide for any repairs that may be needed; carpenters and blacksmiths are busy doing their work, the bay echoes with the noise of hammers and saws. Other vessels, called *chasseurs*, come from France to take away the fish. On the shore rises the little wooden hut of the *cooman*, a Danish merchant who lives there during the summer months to trade with the people and sell spirits. No night comes on to interrupt the incessant labour; during the middle of May the sun is never below the horizon, and but a few stars may be seen on the zenith about the end of June.

Those ships that have chosen their position for fishing take down their sails and lie as quietly at anchor as the wind will permit, the men standing in a close line at the side of the vessel. They are clothed from head to foot in knitted or flannel garments, with waterproof capes and hats. A petticoat of strong linen is tied round the waist, descending below the knees, and to preserve the feet from wet they wear woollen stockings and waterproof boots. Thick woollen gloves lined with leather save their hands from the injury of constant friction from the heavy line. The whole forms a curious picture of ragged, patched, greasy, well-tarred habiliments, which a comic pencil might rejoice to portray. The men, indifferent to their appearance, seek only to be saved from moisture. The lines they use are necessarily very heavy to bring on board a fish weighing say forty pounds. There are two hooks baited with the entrails of fish; but the voracity of the cod is such that it is scarcely necessary to be too particular as to the lure. Thus the men stand for six hours consecutively, gently moving the line, and when a shake indicates a catch, lifting the heavy weight on board.

The fatigue is very great, and much of it is pure loss, as the line too often brings up another fish, called the *fétan*, which though very good to eat, does not bear preserving. The sailors hold this interloper in extreme aversion, as it often breaks the line by its weight, and gives them much trouble to heave on board.

Let us now take a glance at the scenery which surrounds these hardy seamen. The coast is broken up into large gulfs, strewn with shoals and reefs of a most dangerous character, where misfortunes are so frequent that the place is called by the fishermen 'The Ships' Cemeteries.' Enormous precipices line the coast, with heaps of volcanic stones, worn by the action of the waves, lying at the foot. These rocks are cut at certain distances into spaces like the mouth of an immense river, called fiords, which communicate with the sea by a comparatively narrow inlet, and spread out into a sort of lake, surrounded by vertical and jagged rocks. The more sinuous the outlet, the more sure is the anchorage; and in each bay there is generally found one sandy spit, forming a sort of natural jetty, behind which the ships are secure, and where the coxman builds his hut. Far away in the distance rises the gigantic cone of the extinct volcano Sneffells-Jökul, whose summit is covered with rose-tinted snow. In the hollows of the rocks thousands of sea-birds build their nests, to be slaughtered by the inhabitants at a certain season for the sake of *fuel*, their flesh being utterly unpalatable to the least fastidious appetite.

One of the most important fiords is the Dyre-Fiord, where a small hamlet of a dozen huts or *bers* is built in a large meadow. These constructions are not easy to describe; they are low and massive, formed of lava-stones and peat. To avoid cold and damp within, a very small door opens into a dark narrow passage, towards which the rooms converge. The walls and pointed roof are covered with turf, upon which grows a thick crop of grass, making it very difficult to distinguish the *ber* from the field in which it stands. Within, the accommodation is most simple—a kitchen and one sleeping-apartment, with closets to contain provisions, clothes, and fishing apparatus. Beyond the vegetable garden is a building for drying fish, the planks of which are separated to admit the free circulation of the air. Here the decapitated cod are hung, emitting a savour far from pleasant. The heads form the food of the Icelanders with butter and milk; the fish are sold for export. The sea-wolf is also largely eaten, though its flesh is tough and rancid, the frequency of leprosy and elephantiasis in the island being attributed to this unwholesome diet.

Men and women, masters and servants, all inhabit the same room, whilst cleanliness is not much attended to; but poor as they are, and accustomed to great privations, they set an example of cheerful contentment. The beauty of the young girls is remarkable; their fair hair falls in long plaits, partially covered by a black cloth coat, daintily worn on one side of the head, and finished at the top with a tassel of coloured silk run through a silver or steel buckle, which floats on the shoulder. It reminds the traveller of the Greek head-dress; but the blue eyes with their sweet benevolent expression soon recall to his mind their Danish origin. The dress is made of the cloth woven in the country, and on festival days the bodice is gaily adorned with silver braid and velvet, whilst the belt and sleeves are ornamented with silver devices, beautifully chased and often of great value. On wet and cold days the shawl becomes a useful mantilla, completely enveloping the head, and defending the wearer from the effects of the frequent storms.

The people offer the most generous and cordial hospitality to all travellers, and especially to shipwrecked mariners. An opportunity for proving this hospitality once occurred in the open and dangerous bay of the Westra-Horn, surrounded by breakers and reefs. Here forty vessels were fishing on a fine morning in March, when the breeze began to freshen. The cod was abundant, and the men were tempted to stay too near the coast. All the vessels but five doubled the point; these beaten back by the enormous waves, and not daring to raise a sail, were broken on the rocks. Thirty men reached the shore, sixty-six found a watery grave. The *sea-bird* struggled long, until breaking up, all perished excepting the mate and cabin-boy; the former had received a severe wound in the leg by falling on some broken glass. Tied to the rigging, together they awaited their fate, frozen with cold, the waves washing over them. After three hours the boy expired of exhaustion; and the mate unloosing the ropes was soon thrown on to the shore. The corpses of his friends were lying around him, the survivors having gone inland for shelter; but with great difficulty he followed them, crossing streams and marshes, sinking into ice and snow at every step, his wounded leg torn by the sharp points. Six weary hours were thus passed, when his heart-rending cries at length reached two Icelanders, who carried him into a *ber* not far off.

For five months these good people nursed and tended the sufferer. At the end of that time he was still confined to bed, but the healing had begun. A vessel was sent round to bring him away; yet his hosts evinced much sorrow at the prospect of his departure. At their request the captain left him one night longer, when the shipwrecked mariner was escorted to the beach by the whole family, all manifesting a deep emotion. After thanking the father, not only for his care of the survivor, but also for the burial he had given to the victims of the storm, the captain assured him that the French government would indemnify him for the expense he had incurred; but the good man only pressed his hand, declaring that he had done his duty, and deserved neither indemnity, thanks, nor recompense. The Minister of Marine sent a gold medal to him after hearing of his generous conduct.

Robbery, murder, and theft are almost unknown in this peaceful little country; not a soldier or policeman is needed even in the capital Reikiavik; a fact which fully proves the virtues of the Icelanders. Travellers have asserted that the hospitality was not quite so disinterested as it appears, and there may be an exception in certain localities, such as the road to the Geysers, traversed every year by many tourists. Here the Lutheran ministers offer shelter in their churches, which are transformed into hotels, and provide fish, milk, and coffee for those who need it at a certain charge. Roads are almost unknown; the configuration of the ground wholly prevents their formation. The island has been the scene of such tremendous volcanic action that the mountains are heaped together in the most fantastic manner. From the glaciers which cover the summits of extinct volcanoes rush torrents of water, bringing down the disintegrated rocks to accumulate in the valleys below.

Yet in the midst of these convulsions, Nature

does not forget her rights, and wherever a little earth can be found there grows a tuft of grass. Meadows undulating with the rocky ground cover it with a green mantle, and in summer the botanist will find most of the wild-flowers which bloom in our temperate climates. During the winter, the water infiltrating through the soil turns the whole into an impassable marsh, where the unwary traveller may sink into quicksands of the most dangerous character, since there is no exterior sign to denote their existence. In a country whose natural configuration scarcely admits of carriage-roads, ponies are invaluable, their robust constitution defying alike climate and fatigue. Small in size, quiet and patient, they resemble the Corsican or Pyrenean breed. Such is their docility, that the most inexperienced rider may mount without fear, and trust to their instinct in the difficult mountain passes. Three or four thousand are exported yearly into England, where they are used chiefly for coal-mines; and such is the estimation in which they are now held, that their cost has largely increased.

The eider-duck is one of the most profitable sources of revenue, and strict laws prevent their wanton destruction. A gun is not allowed to be fired near the places they frequent, for fear of alarming them; thus they have become so tame that they allow themselves to be stroked without fear. They choose the islands for their homes—where their deadly enemy the fox cannot reach them—and the steep barren rocks in the fjords. Many of the owners clear a thousand a year by the sale of the down, without any expense. It is scarcely necessary to make laws for the preservation of game, since shooting is a pleasure the Icelanders wholly despise. The curlew, snipe, golden plover, and wild-duck abound, as well as the delicate white partridge; but the natives despise them as food, and prefer smoked or dried salmon, with which their streams abound.

In the middle of August the greater part of the French ships meet in the Faskrud-Fiord before starting home. By this time the snow is beginning to fall and ice to form around the bays. Detached icebergs make their appearance in forms as singular as varied, sometimes resembling fantastic animals or the prow of a ship. The anchors are raised, and the convoy leaves the wintry shore; and anticipations of home once more dawn on the weary fishermen.

THE ADMIRAL'S SECOND WIFE.

CHAPTER VII.—COMING HOME.

PREPARATIONS for the much-talked-of marriage are pushed on rapidly; and before the spring flowers are making the slopes of Hayes Hill glad with their brightness, the wedding—a very quiet one—takes place. Laura Best is not present, though everybody says how charmingly she has acted towards Katie. She called on the bride-elect, and on the wedding morning a short perfumy note of congratulation and a handsome set of opals arrive as a marriage gift. Sir Herbert is pleased at his daughter's attentions to his bride, and is glad that after all such a friendly feeling has sprung up between them.

The fact is, Laura Best, finding that opposition

cannot prevent the marriage, has decided to give it her apparent sanction. Not for worlds would she interfere with the happiness of the wedded pair or throw unpleasantness on their path. So she quietly does all that is needful in the way of proper attention, and then goes home to Hayes Hill to her children and duties there. Yet in secret she bears a heavy heart with her, and mourns over her father's infatuation.

If the Admiral's wedding has been a quiet one, the home-coming is destined to be quite the reverse. The whole town of Seabright wakes up, and great preparations are made to welcome the pair. The ships in the bay are illuminated, flags flutter in the breeze, and bells peal out their jubilant chimes.

Katie smiles proudly to herself as she walks through the lofty apartments of Government House, and feels she is mistress there now. It is pleasant to roam about everywhere, and know that she has the right to do so; pleasant also to stand in the shade of the deep window, and listen to the joyous pealing of the bells, which she knows are pealing for her. Wealth and rank are in her grasp; she has entered on the honours of her new position, and will rule with no timid hand. Self-confident and fearless, she laughs to herself in utter exultation at the warnings, the croakings, the forebodings that a while ago assailed her. Walter Reeves is very angry indeed, when he finds out how unceremoniously he has been set aside; and he is intensely bitter against Katie in the first flush of his disappointment; so doubtless it is fortunate for all concerned that his ship, the *Leo*, is ordered off on a cruise in the Mediterranean. He will be away for nearly twelve months, and surely in that time the most poignant heart-wound may be healed. Besides, change of scene is all-potent in such cases!

As months pass away, Lady Dillworth's tastes rapidly expand and assert themselves; ere long she becomes the leader of society in Seabright, and the most fashionably dressed woman there. Sir Herbert is generous beyond measure; Katie must not have a wish ungratified, or a desire unfulfilled if he can help it. And so the young wife, loving admiration and homage with a wild passion, basks in them to her heart's content. The semi-official parties at Government House, stately and dignified as they were, rapidly give place to balls and quadrille assemblies, to late hours and overcrowded rooms. The junior officers of the ships rejoice at the change; while the older ones shake their heads ominously, and gradually withdraw themselves from excitements that have no longer any charms for them.

Lady Dillworth is the belle on all occasions. Whether she entertains the company with her rich voice as she sings for them, or delights them with her sparkling conversation, or whirls with some favoured ones through waltz or galop, she is ever the attraction of the evening.

If the Admiral sometimes thinks there is rather

too much gaiety, and longs to have Katie now and then all to himself, he does not say so, for he cannot bear to deprive her of any enjoyment on which her heart is set. Often and often during the season, at Katie's old home, sounds of the rattle of carriages come up to the cosy drawing-room, and the lamps flash for a moment on the blinds.

'There they go—another party at Government House, I suppose!' Mr Grey will say, as he quietly looks up from his books.

'Yes, my dear; Katie is giving a ball to-night, and such a magnificent dress she has got for it! Sir Herbert grudges her nothing.'

'So much the worse for Katie. Spending is an art easily learned; and where in the world she gained her education on that point, I am puzzled to know. Not from you, Sarah; you were always economical!'

'Katie's position is different from ours, dear; she must keep it up.'

'But she has no need to keep up such an endless whirl. I wonder the Admiral is not tired to death of it. I should be, I know.'

And so, all through the quiet night, husband and wife are roused every now and then from their slumbers by the rattle of passing wheels; and Mrs Grey sighs to herself about Katie's love for excitement, but will not blame her aloud, even to her husband's ears.

CHAPTER VIII.—RETURN OF THE 'LEO.'

December comes round again with its blustering winds and rude gales; there is every prospect of a spell of rough weather, and Captain Walter Reeves looks with intense satisfaction at his gallant ship the *Leo*, again riding securely at her anchor in Seabright Bay.

A season on shore just now, when festivities are about to commence, is in his idea far preferable to being tossed about on a squally sea or cruising about from port to port; so he congratulates himself on being ordered home. He hears of the gay doings at Government House, and how Katie is the reigning belle of Seabright; and he listens placidly, without one throb of emotion. Time has proved a panacea. He has no pang of regret that Sir Herbert is the husband of this very attractive woman of fashion, instead of himself. As a matter of duty, he is on his way to call at Government House, when outside a fashionable shop in one of the streets he sees a well-appointed carriage drawn up, and in it he catches a glimpse of a well-known form and face. An obsequious shopman is standing on the edge of the curb-stone displaying some articles of bijouterie; a coachman in dark livery, with a black cockade in his hat, is holding the reins. It is Lady Dillworth. There is no mistaking her imperial manner, as she speaks out in that slightly commanding voice; neither is there any mistaking her handsome face, her brilliant eyes, her dark coronal of hair, as she sits there in her proud beauty. Walter, as he crosses the street, takes note of her velvet, her sealskin, and the feathers and the damask rosebuds in her bonnet, and thinks all this suits the Admiral's wife very well. He hears her say to the shopman:

'The price is eight guineas, you say. Are the stones real?'

'Yes, my Lady; and they are very fine and well set. You are the first to whom I have had the honour of showing them.'

'Send one of them to Government House. Or stay,' adds she musingly—'I want another for a present for a friend; so you may send me two bouquet-holders.'

'Sixteen guineas for such rubbish as that! I'm very glad the money comes out of the Admiral's purse, and not out of mine. A poor Commander's exchequer would not stand many such attacks as that,' thinks Walter, rather ungallantly, as he now greets the occupant of the carriage.

Katie is surprised to see him, and says so as she holds out her daintily gloved hand. 'I had no idea the *Leo* had returned. Have you been long here?'

'I arrived only last night, and am on my way to Government House.'

'How unfortunate there is no one at home! Sir Herbert went to Belton Park this morning, and I am on my way to the station to meet a friend who is coming to stay with me. By-the-by, you know the young lady—Liddy Delmere. Do you remember her?'

'Isn't she very pretty and a blonde?'

'Yes; she has both those attractions.'

'And doesn't she sing nicely?'

'O yes! Liddy can sing if she likes; and her voice is not a bad soprano,' replies Lady Dillworth with one of her brightest smiles.

'Then I'm sure I've often met her at your house in former days.'

'You had better come and refresh your memory this evening. We shall be quite alone, and very pleased to see you at Government House.'

Captain Reeves is of course delighted to meet Lady Dillworth on such friendly terms. He accepts the impromptu invitation at once.

The past, with its shadows and disappointments and jealousies, is gone for ever. Better now to banish every recollection of it from his heart, and meet Katie on an entirely new footing.

As if by tacit understanding, they both decide this is the wisest plan. They meet and separate as mere every-day acquaintances. Nothing can be more unembarrassed than her ladyship's smile as she acknowledges Walter's parting bow, and drives off, to the admiration of the staring urchins in the street.

'Quite alone' is a mere relative term with Lady Dillworth; for when the footman throws open the drawing-room door on that evening to announce Captain Reeves, the latter sees the room is already half full of guests. Katie stands near the piano; her dark velvet dress falls in sweeping folds, unbroken by flounce or trimming; the beautiful set of opals—her step-daughter's wedding present—shine out with a subdued light from neck, arms, and breast. Beside her is Liddy Delmere, who in her bright blue silk dress, and with her sunny hair tied with ribbons of the same azure tint, forms a contrast to her hostess, in which neither loses.

Ere long, Walter finds himself seated beside Miss Delmere, for they have renewed their acquaintanceship with mutual satisfaction, and plunge at once into discursive recollections of the past.

'We had some pleasant times together in the days long ago,' begins Walter.

'O yes; I remember meeting you several times at Mrs Grey's, also at a picnic on Bushby Plain, and at a gipsy party. Hadn't we capital fun sometimes?'

'Yes, really. What a pity these happy days are over. We never can recall those bright fresh hours, when the heart gilds everything with a magic glamour.'

'Speak for yourself, Captain Reeves! For my part, I enjoy things as much as ever I did; and my heart "gilds" a good deal still. Do tell me some of your adventures. What have you been doing all the months you were away?'

'Nothing worth relating. I neither discovered a desert island nor a new race of savages. I really have no wonders to narrate.'

'How marvellous! The very lack of incidents makes the thing curious. Now, if I had been cruising about in the *Leo* for months, I should have gleaned materials enough for at least two volumes of travels.'

'Ah! you ladies draw largely on the imagination. My experience is just this: I went away from England last spring; I return again in time for the Christmas pudding.'

'You sailors are all alike. I never met one yet who could give me the merest sketch of his voyage—all seems a blank, but the going and returning,' Liddy asserts laughingly.

'We had some nice balls at Malta,' replies Walter, rousing himself with a sudden recollection.

'Had you? Who gave them?'

'Sometimes we did; and crowds of the prettiest girls I ever saw, came.'

'Very flattering to the givers.'

'Oh, I wish you could see the *Auberge de Provence* when it is made ready for a ball; it looks just like a fairy scene. The old knights of Provence would never recognise the place if they could return to take a peep at it. As one passes through the hall, it appears like an orange grove; the trees are full of golden fruit and fragrant blossoms; and clusters of coloured lamps shine out like rubies through the green leaves.'

Walter is fairly launched into his subject now; one recollection speedily calls up another, till Liddy and he grow eloquent, and enjoy themselves amazingly.

He begins describing some musical charades they 'got up' at Malta.

'How nice they must be! But I can't quite understand them.'

'We merely take a word, divide it, and make our singing descriptive of the parts, instead of acting them out. For instance, take Ravenswood.'

'A sweet word, particularly if one has to croak out a raven chorus! Oh, I should like that extremely!' laughs Liddy.

'Ah, no; you don't catch my meaning. We make quite a grand affair of it, have a drop-scene, on which birds and trees are painted, and our illustrations are from the opera of *Lucia di Lammermoor*.'

'Quite a musical drama on a small scale, I declare! I wish we could get up something of the sort here. I'll ask Lady Dillworth about it. And here she comes.'

Katie walks over, looking rather amused at the evident good understanding between Liddy and Walter, as they thus interchange recollections with much *empressment*. She seats herself

beside them, and the subject is discussed in all its points. Lady Dillworth enters into it with impulsive eagerness. Already she is longing for something new and fresh, something that will cause a sensation among the 'upper ten' at Seabright.

Several other guests join them, and are long an animated group of people are professing willingness to aid such a charming scheme; anything novel is so attractive to those whose whole life is excitement. Walter takes the initiative at once.

'I have all the music we need. The band-master of the 25th arranged it for me with the songs, duets, and choruses. It's capital for drawing-room practice, if we can only get enough performers.'

Everybody is ready to join, so the *rôle* is settled on the spot. Walter is to be Edgar; Liddy, Lucy Ashton. But here the young lady enters a protest.

'I don't wish to be Lucy. If you want me, you must let me be Lucy's mother. I make a splendid old woman.'

'Then who will be the unfortunate bride?—Will you, Lady Dillworth?' asks Major Dillon, turning towards her.

'O yes, if Miss Delmère objects.'

So it is settled. Walter infects the whole party with his eagerness. Scenes, music, costumes, and arrangements are talked over; and Katie is all anxiety to carry out the plans with due effect. Walter is to bring on shore the music-scroll and sketches of the costume; and the intended performers are invited to meet him to-morrow morning at Government House, for the first rehearsals.

'Now that affair is settled, we'll have some music,' Katie says, as she rises and goes towards the piano. Walter follows her. 'Have you forgotten all your songs, Captain Reeves?'

'O no. How could I? You taught me most of them,' he replies.

'Will you try one now?'

'Don't ask me to sing a solo. I should break down at once; but if you will allow me to join you in a duet, I'll try to manage it.'

Katie turns over a book of manuscript music, and they fix on *Then and Now*.

'The words are dreadfully stupid, but the air is pretty,' asserts Lady Dillworth, as she runs over the prelude:

We heard the tower bells pealing

On that soft summer night,

Your hand was linked with mine, love;

Your heart, like mine, was light.

We whispered low together

Of that hope and of this;

While far above, the joyous bells

Seemed echoes of our bliss.

Again those bells are pealing;

We hear them now, and sigh;

No longer can their chiming, love,

Blend with our thoughts of joy.

Our lives for aye are parted;

And on the wintry air,

Those crashing sounds but haunt us now,

Like echoes of despair.

The two voices ring harmoniously and plaintively through the rooms. One could almost imagine the singers are actually using the 'past to give pathos' to the words. But nothing is further

from their thoughts. Katie is only deciding that, after all, Walter's voice will 'do' with hers in the duets of the charade; and Walter is wishing—just a little—that Miss Delmers had retained the part of Lucy, as at first proposed.

ELECTRICITY AS A LIGHT-PRODUCER.

It has long been the opinion of scientific people that in electricity we have a power the development of which is only at present in its infancy. The marvellous details of our telegraphic system constantly remind us that there is a mysterious fluid round about us which can to a certain extent be made subservient and obedient to the will of man. This familiarity with that which would a few centuries ago have been stigmatised as the outcome of sorcery, has led the ignorant to place a blind belief in its powers. The subtle fluid has in fact taken the place of the necromancer's wand, and is believed by many to be capable of anything or everything. The electrician is thus credited with much that does not of right belong to his domain, and the wildest speculations are occasionally indulged in as to what next he will do for us. That electricity will prove of far more extended use than the present state of knowledge allows, we all have vague anticipations, and among these is the reasonable hope that it will some day supersede coal-gas as a means of artificial illumination. We propose, by a brief review of the present position of electrical research, to point out how far such a hope is justified by facts.

Sir Humphry Davy was the first to discover that when the terminal wires of a powerful electric battery were furnished with carbon-points and brought into such a position that they almost touched, the space between them became bridged over with a dazzling arc of light. The excessive cost of producing this light (owing to the rapid consumption of the metal-plates and acids which together form the battery-power) rendered it for a long time almost inapplicable to any other purpose than that of lecture-room demonstration. But it was evident to all that a means of illumination so nearly approaching in its intensity the light of the sun, would, if practicable, be of immense value to society at large. Apart from its cost, there were many other hindrances to its ready adoption. The incandescent carbon-points—which we may here remark are cut from a hard form of gas-coke—were found to waste away unequally. Some plan had therefore to be hit upon of not only replacing them at certain intervals, but also, in view of this inequality of consumption, of preserving their relative distance the one from the other; otherwise the light they gave became intermittent and irregular. These difficulties were met by employing clock-work as a regulator, and more recently by a train of wheelwork and magnets set in motion by the current itself. These arrangements naturally led to complications, which required the constant supervision of skilled operators, and the coveted light was necessarily confined to uses of a special nature where the question of cost and trouble was unimportant.

The use of the battery for the electric light has for some years been almost entirely superseded by the magneto-electric machine. The construction of this machine is based upon Faraday's discovery, that when a piece of soft iron inclosed in a coil of

metal wire is caused to pass by the poles of a magnet, an electric current is produced in the wire. The common form of this machine consists of a number of cast iron cores so arranged upon a revolving cylinder that in continual succession they fly past a number of stationary horse-shoe magnets placed in a frame round its circumference. By a piece of mechanism called a commutator, the various small streams of electricity thus induced are collected together into one powerful current. This invention forms one of the most advanced steps in the history of the electric light. But although it produces electricity without the consumption of metal involved in the battery system, another element of cost comes into view in the expense of the steam-power necessary to work it; besides which the original outlay is considerable.

In the year 1853 a Company was formed at Paris for producing (by the aid of some large magneto-electric machines) gas for combustion, by the decomposition of water. The Company failed to produce gas, and what was perhaps more to the annoyance of the subscribers, they failed also to shew any dividends, and the expensive machines were voted impostors. However, an Englishman, Mr Holmes, succeeded in turning them to better account, and eventually produced by their aid a light of great power. Mr Wilde of Manchester was another worker in the same field; and improved machines were soon introduced to public notice by both gentlemen. A few years after, the South Foreland and Dungeness light-houses were provided with experimental lights. (The first-named headland had previously been furnished with an oxyhydrogen or lime light, a source of illumination which is also open to the same objections of requiring constant attention and renewal.)

It is a matter of surprise to most visitors to the South Foreland lighthouse to find that a small factory and staff of men are necessary to keep the electric apparatus in working order. The extent of the establishment is partly explained by the fact that, in case of a breakdown of any part of the apparatus, everything is kept in duplicate. Hence there are two ten horse-power steam-engines, and a double set of magneto-electric machines, although only half that number are in actual use at one time. The old oil-lamps are also kept ready, in view of the improbable event of both sets of electrical apparatus going wrong.

Although lighthouses were the first places to which electrical illumination was applied, there are many other purposes for which that species of light is invaluable. One of the chief of these is its use in submarine operations. Unlike other lights, being quite independent of atmospheric air or any kind of gas for its support, and merely requiring an attachment of a couple of gutta-percha-covered wires for its connection with the source of electricity (which may be at a considerable distance from the place of combustion), it is specially applicable to the use of divers. The importance of a means of brilliantly lighting the work of those engaged in clearing wreck or laying the foundations of subaqueous structures cannot be over-estimated. There is another service too in which we may hope some day to see it commonly employed: we mean as a source of light to our miners. For this purpose, the burner could be placed in a thick glass globe hermetically closed;

in fact the globe might even be exhausted of air, for experiments prove that the light is in several respects improved when burnt in a vacuum! The danger of fire-damp explosion would by this means be almost altogether obviated; for unless the glass were broken (and abundant means suggest themselves for protecting it), no communication could be made between the light and the gas-laden air of the mine. As a means of night-signalling, the electric light can also be profitably applied. This can be done by an alphabet of flashes of varying duration; the readiness with which the light can be extinguished and rekindled by the mere touch of a wire, rendering it peculiarly adapted for such a purpose; while the distance at which it can be seen is perhaps only limited by the convexity of the earth. Several of Her Majesty's ships are now being fitted with the electric light, which is to serve both for signalling purposes, and as a precautionary measure against the attack of torpedo-boats. For military field operations a brilliant light is often useful; and an electrical apparatus is in actual use by one of the belligerents in the present war. In this case, the light is doubtless worked by an electric battery, as a steam-engine is hardly a convenient addition to the impedimenta of a moving column.

Having called our readers' attention to the several special public uses for which the electric light is available, we may now consider how far it can serve us for the more common wants of every-day life. In its crude state as we have described it, governed by such a touchy thing as clock-work, it could not possibly compete with gas for ordinary purposes. But one or two improvements have within the last few months been made, which have led many to hope that the day is not far distant when the light will become common in our streets, if not in our houses.

These improvements are two in number. The one is a plan whereby the electric current can be subdivided so as to serve a number of different lights, and the other is an improvement in the arrangement of the burner. The first-mentioned invention seems most certainly to bring the system more on a par with gas-lighting, only that wires take the place of pipes. But the second offers features of a more novel character. The carbons, instead of being placed point to point, one above the other, as in the old system, are put side by side and made into a kind of candle. The carbons therefore represent a double wick; while the portion of the candle usually made of tallow is made of kaolin, a form of white clay used in the manufacture of porcelain. The points are thus kept at a fixed distance apart; and as they burn, they vitrify the kaolin between them, which both checks their waste and adds, by its incandescence, to the light produced. The old difficulty of keeping the carbons apart by the aid of clock-work, therefore disappears. The invention of this 'electric candle' is due to a Russian engineer, M. Jablockhoff. Another plan which is also credited to the same inventor is that of doing away with the carbon-points altogether, and substituting for them a thin plate of kaolin. The light produced is said to be softer, steadier, and more constant than that obtained by any previous method. Successful experiments with M. Jablockhoff's invention both in France and England have shewn it to be readily applicable to many purposes. It was

lately tried at the West India Docks, London, where its power of illuminating large areas for the purpose (among others) of unloading ships by night, was fully demonstrated. Moreover, its portability is such that it can be carried into the depths of a ship's hold. We may mention as a result of these experiments, that the various gas companies' shares have been depreciated to a considerable extent.

Meanwhile, improvements in the magneto-electric machine have not been wanting; Siemens in England and Gramme in France have succeeded in obtaining intense currents from machines far less bulky than those of the old pattern. But still steam-power is required to set them in motion, and until this is obviated, we cannot expect that the electric light can become really available for more general use. The inventors claim that their method of illumination is, for the amount of light obtained, far cheaper than any other known, pleading that one burner is equal to one hundred gas-lights. But we must remember that for ordinary purposes this amount of light is far beyond our needs. In factories where steam-power is already available, and where the light would supersede a large number of gas-burners, it can of course be employed with profit. Indeed we learn that at several large workshops in different parts of France the light is in actual use with the best results. Some of the railway stations both there and in Belgium are also making arrangements for its immediate adoption.

The problem, however, which has now to be solved is, whether the light can be made available for domestic purposes. We fear that the necessary motive-power presents an insuperable objection; for although, as we have explained, one engine will feed a certain number of lights, it will bear no comparison in this respect with the capabilities of a small gas-holder. Besides which, a man would have far more difficulty and expense in starting a steam-engine in his back-garden than he would have (as is commonly done in country districts) in founding a small gas-factory for the supply of his premises. Without losing sight of the benefits which coal-gas has given us, we may hope that it is not the last and best kind of artificial illumination open to us. It blackens our ceilings and walls; it spoils our books and pictures, besides robbing our dwellings of oxygen, and giving us instead a close and unhealthy atmosphere. The combustion of electricity is on the other hand, as we have already shewn, *independent of any supply of air*; and instead of vitiating the atmosphere, it adds to it a supply of that sea-side luxury ozone, which may truly be said to be 'recommended by the faculty.' Besides these advantages, it can be used without any sensible rise of temperature. Another great advantage which its use secures is its actinic qualities, which would enable artists and all whose work depends upon a correct appreciation of colours, to be independent of daylight.

In conclusion, we may say that, beyond the special uses for the electric light which we have enumerated, and for which it has by experience been found practicable, we see no likelihood of its more general adoption, until two requisites are discovered. The one is a substance that will, without wasting away and requiring constant renewal, act as an incandescent burner; and the

other is a cheap and ready method of obtaining the electric fluid. For the former we know not where to look, for even the hardest diamond disappears under contact with the electric poles. But with regard to the latter, we cannot help thinking how, many years ago, Franklin succeeded by the aid of a kite-string in drawing electricity from the clouds. Is it too much to hope that other philosophers may discover some means not only of obtaining the luminous fluid from the same source, but of storing it up for the benefit of all?

JAPANESE WRESTLERS.

It is a fine clear day in February; and the bright sun shining upwards a cloud to impede his rays, lights up the hull of H.M.S. *Lyre*, swinging lazily round her anchors in Yokohama Bay. Scarcely a ripple can be seen on the surface of the water, and numberless boats are darting to and fro, conveying passengers from the various ships to the shore. On board the corvette the blue-jackets and marines are reclining about the forecabin smoking and sewing, for it is Thursday afternoon, the day set apart in English men-of-war for the men to make and mend their clothes; a concession which Jack values the more for the privilege of smoking all the afternoon which accompanies it. Clearly it is not a day for any one to remain cooped up in a ship, who is not detained there by duty. So think we officers; for most of us have shifted into plain clothes, and are ready to go ashore. The officer of the afternoon watch, who is endeavouring to beguile the weary four hours he has to spend on deck by levelling his spyglass at every object far and near, looks gloomily at a party of us getting into a sampan, and remarks, with a view to cheering us up, that the glass is falling rapidly, and he expects dirty weather before the night; *he* wouldn't go ashore if he could, &c. But we have been at sea too long to be persuaded out of anything by a little chaff; so with a parting joke at our grapes, we get into the crazy little sampan, and manage to seat ourselves without capsizing her, a work of some little difficulty. The four half-naked, muscular little fellows who form our crew work their long sculls with great vigour, keeping time to the beat of the unwieldy oars with a shrill monotonous chant, whose burden is 'Go ashore! I go ashore!'

It is a glorious view that lies before us on that bright winter day. The long esplanade, or *bund*, that fringes the shore is lined with the tall white houses of the foreign settlement, to the southward of which is the beautiful wooded hill called the Bluff, the white cliffs of which are dazzlingly bright in the sunlight. The bungalows of the foreign residents are for the most part on the Bluff, each house inclosed in its own beautiful grounds; and here too, about two miles from the settlement, is the race-course, an invariable accompaniment to any large gathering of Englishmen in the East. Yokohama itself lies in a valley between the Bluff on the one hand and the Kanagawa hills on the other; but inland rises range after range of lofty mountains, and towering far above everything is the snow-capped crest of Fusi-yama, the 'peerless' mountain of Japan, which is forty-five miles distant from the bay where our ship is lying. Fusi-yama is a volcano in the shape of a truncated cone, but no eruption has taken place for more than a century; a fortunate thing for the country, as fifty

thousand people are said to have perished at its last great outbreak, which almost destroyed the capital, Yeddo. Shocks of earthquake are very frequent, though slight, in Yokohama, and the neighbouring town, Kanagawa; in fact, most of Japan is subject to these volcanic disturbances, which occasionally cause great damage. It is on this account that the houses are built generally of such slight materials, as they can endure shocks which would infallibly overthrow any building constructed after the European fashion. In the summer, when the snow has melted from the top of Fusi-yama, bands of pilgrims dressed in white, who have come from all parts of the empire to worship the peerless mountain, throng in great numbers along the roads at its base. At this season the ascent is often accomplished by foreigners for the sake of the magnificent view which is obtained from the summit on a clear day; though whether it is worth while going through so much to obtain so little is of course a matter of opinion. Many people will tell you they go up for the sake of saying they have been there, forgetting that any one who has not been there can as easily say the same thing. For my own part I never could see the object of climbing a mountain only to come down again on the other side, and therefore in my numerous excursions into the interior of Japan, I gave Fusi-yama a wide berth. Ponies are usually employed by those who believe in the merits of four legs as compared to two; and the deep ashes which cover the upper part of the mountain render this mode of ascent preferable to the severe labour of climbing on foot. The weather is so clear on the day in question that the deep gullies down the sides can be easily traced by the naked eye as we are pulling ashore.

While we have been admiring the beauties of the scene, our sampan has passed round the projecting arm of the English Hatoba, a stone jetty which protects the landing-place from the heavy swell which often sets into the bay; so we land and make our way to the bund with some difficulty, owing to the crowd of coolies who are passing to and from the merchants' godowns with heavy packages slung on bamboo poles between two men. Now comes the question, how are we to pass our time? for amusements are somewhat limited in a small settlement like Yokohama. To be sure, we can go to the club and play billiards or bowls or read the papers; but the afternoon is so fine that it seems a pity to waste it indoors. We might spend a few hours very pleasantly in the Benien Doré, a street filled with shops for the sale of lacquer-work and curiosities of different sorts; but unfortunately it is nearly the end of the month, and I need scarcely tell any one acquainted with the manners and customs of naval officers that our dollars have grown small by degrees and beautifully less, and we are anxiously waiting for payday.

The most popular idea seems to be to walk round the race-course to Mississippi Bay, on the south side of the Bluff, the favourite drive of the Yokohama ladies; but just as we have resolved on this, a man passes making some proclamation in a high sing-song tone, which seems to meet with general approval from the natives. On inquiring, we find that he is announcing the arrival of the champion troupe of wrestlers, who intend giving a performance that afternoon on a piece of waste

land just outside the boundaries of the foreign settlement. Nothing could have happened more apropos; so jumping into some of the odd-looking little hand-carriages which ply for hire in great numbers about the streets of most Japanese towns, we are rattled along the streets at a rapid rate by the active little drivers, who seem to possess the enviable faculty of never tiring, for they trot along as gaily at the end of a thirty miles' run over indifferent roads, as when they started. On arriving at our destination, we find numbers of natives on the same errand, 'gaily dressed in their Sunday best,' entering an inclosure which has been hastily made out of long bamboos covered with matting, to keep out the too curious eyes that would gaze at the performance gratis. A payment of a quarter *bu* each (about threepence in English money) admits us to the interior, which presents a very striking scene. Round the sides of the large inclosure are numerous bamboo stages, crowded with the wealthier class of natives and a few foreigners; while in the amphitheatre some thousands of people are assembled, many of them women, whose gay robes set off their attractions to perfection.

Every one has his holiday face on, and the ceremonious politeness which usually characterises the meeting of any Japanese, has for the time given place to mirth and gaiety. Itinerant vendors of cakes and sweets ply their trade among the crowd with much apparent success; and here and there is a stall for the sale of *saki*, a strong spirit brewed from rice, and much resembling inferior sherry in the taste and smell. There is a total absence of intoxication, and I may say very few drunken men are ever to be seen about the streets. By the time we have mounted a stage, and settled down on the chairs a neatly dressed *musume* (young girl) has procured for us, the performances are about to commence, and a man is giving out the names of the first pair of wrestlers.

In the centre of the amphitheatre a mound has been raised, on which a ring has been formed by banking up the earth to the height of a few inches. Two grave-looking elderly men, apparently the judges, now seat themselves upon mats on the mound, and unfurling their paper umbrellas, light their pipes, and commence smoking in dignified composure; while the two wrestlers doff their *kimonos* (robes) and enter the ring perfectly naked but for a cloth round the loins. They are very far removed from our idea of what an athlete ought to be, for though muscular, they have an ungainly heaviness of figure. Weight is indeed thought of such importance in these contests that men are fattened for them like prize cattle, under the mistaken belief that such size is an advantage to the fortunate possessor!

A tedious preliminary performance has to be gone through before the actual business of wrestling commences. Each man comes to the centre of the ring, and squatting down in front of his antagonist, raises each leg in turn, and then brings it down heavily on the ground, at the same time striking his thigh smartly with his open hand. I suppose this is meant as a sort of challenge; but it has an extremely ludicrous effect, at least to foreigners, to see two very fat men so employing themselves. Both men now quit the ring and take a draught of water and a pinch of salt, while they rub their arms and hands with mud, in order that they may

get a better hold of each other's naked body. At length they re-enter the ring, and the real struggle now begins. They squat in front of each other like two huge frogs and strike their hands together, at the same time uttering a curious hissing noise, which gets louder and louder till they suddenly fly at each other like angry cats. Heavy blows and slaps are exchanged freely in the effort to close, but umpires are behind each shouting out cautions at any attempted infringement of the rules on either side. When they have fairly got hold of each other many a cunning feint and twist is shown, and the struggling bodies and limbs entwine so rapidly that the pair look like one gigantic octopus. At length the bout is concluded by one man being hurled bodily out of the ring into the crowd outside, and the cheering from the excited spectators is absolutely deafening. The victor stalks about the ring for some time in great dignity, receiving the congratulations of his friends, and then repeats his former challenge, striking his thighs heavily and crowing like a bantam cock. Another wrestler, nothing daunted, at once comes forward to try his fortune; while the vanquished combatant, who has picked himself up amidst a running fire of chaff from the unsympathising crowd, resumes his *kimono* with an assumed air of indifference and vanishes behind the spectators.

Three men in succession did the first victor overthrow before he found a foeman worthy of his grip; but he too in turn soon succumbed to a fresh challenger. The judges during all the confusion maintained their seats in great dignity, and smoked away with quiet unconcern while the wrestlers strove and kicked beside them. Their office seemed to be to settle any disputes; but it was almost a sinecure, as I saw hardly any during the afternoon, everything being conducted with perfect fairness and good-humour. All the hard work seemed to be done by the umpires, who were dancing about each combatant in a perfect state of frenzy, and their repeated screams of '*Anatta! anatta!*' (Sir! sir!) when any unfair movement was attempted on either side, soon reduced their voices to mere croaks. To win a round, a man had either to lay his opponent flat on the ground or thrust him out of the ring. Several of the first bouts we witnessed were decided in the latter manner, a heavy man driving his antagonist clean out of the circle by the weight and impetus of his first assault. Any method whatever seemed to be allowed in catching hold; I saw one man win a heat by dexterously catching his opponent by the scruff of the neck and jamming his head on the ground, the whole body perforce following suit. This seemed to be regarded as a sort of 'fool's mate,' for I noticed that the loser was much laughed at; and although the same manoeuvre was attempted several times afterwards, it was never successful.

The light weights had their contest first; and then came the middle weights, if such a term can be applied to men of fifteen stone at least. But the real event of the day was the concluding struggle between the champions, about a dozen in number, who would have passed muster in any assembly where height and strength were the test. Not one of them was under six feet in height, and most of them were considerably over; one gigantic fellow must have been nearly seven feet. All of them were disfigured by the same inordinate

amount of flesh; but the muscles of the arms and legs were very powerfully developed, and the activity displayed in spite of their enormous size was something marvellous. In one severe contest the gigantic champion threw a lesser athlete clear out of the ring on to the heads of the spectators below, overwhelming one of the unfortunate judges in the transit. The latter, however, soon arose, gave himself a shake, and resumed his pipe and seat, apparently none the worse for his rude shock.

The final contest of the day, which took place just before dusk, was between our friend the giant and the next biggest of the band; and after a severe struggle, ended in the former being thrown as scientifically as ever I wished to see. The earth shook with the violence of the fall; but the vanquished hero picked himself up at once, and with a good-humoured laugh at his opponent, resumed his *kimono*, and the sports were concluded.

Not the least amusing part of the afternoon's amusement was afforded by a blue-jacket on leave from the *Lyre*, who threw his cap into the ring, and wanted to try conclusions with the biggest man of the party for a few dollars. A long and amusing conversation took place between the sailor and the natives; but the challenge was not accepted, so Jack put on his hat and walked jauntily away. He was a tall powerful man, and I daresay could have held his own against the giant himself, in spite of his inferiority of weight; for it is a well-known fact that the enormous amount of flesh cultivated by the Japanese wrestlers stands seriously in their way when opposed to a foreigner in good condition. It is not very many years ago that a shining light of the English Church in the East came to Japan and astonished the natives by throwing some of their best men. No doubt, before many years, the Japanese, who are very quick at seizing any new idea, will perceive the folly of feeding their athletes to such a size, and follow the English system of training. A very noticeable feature about these contests was the perfect good-humour with which they were conducted, not a single man losing his temper, in spite of the heavy blows and cuffs which were exchanged with great vigour before closing with each other. While discussing the afternoon's amusement, we walked to the bund in the twilight, and a twelve-oared cutter soon took us on board in time for dinner. Next morning at daylight we were under weigh for Hong-kong.

SHAMROCK LEAVES.

A WAKE.

TIM SCANLAN, while he lived, was only a labouring man; but he was well liked in the country; and it was expected that his funeral would be an unusually large gathering. Crowds flocked to the wake, and a great provision of tea, whisky, pipes, and tobacco had been made. The widow occupied her post of honour at the head of the coffin, and displayed a fair show of grief, joining in with vociferous weeping whenever the 'keening' was led by the older women. She was young enough to have been the dead man's daughter, having come to his house 'a slip of a servant-girl, whom he had married and ruled over very masterfully.

As the night wore on, the whisky began to tell on those outside the room where the corpse lay. The noise increased, and soon apparently became loud enough to 'wake the dead,' as the saying is; for to the consternation and amaze of every one present, the defunct, after a deep sigh and sundry groans, opened his eyes and struggled up into a sitting posture. When the startled company had recovered from the shock, poor Tim was lifted out of the coffin; whisky was liberally poured down his throat; and well wrapped up in blankets and seated in the big chair by the fire, he gradually revived from the trance or stupor that had been mistaken for death. The last of the guests had departed from the cabin, and Tim, still propped up before the fire, was left to the care of his wife. Instead of coming near him however, she slunk off, cringing timidly away into a dark corner behind his chair, whence she directed frightened glances at her resuscitated spouse.

'Mary!' said the man in a stern voice.

No answer.

'Are you there?' peering round, his face quivering with anger and weakness.

'Yes, Tim, I'm here,' faltered Mary, without stirring.

'Bring me my stick.'

'Ah, no, Tim; no! Sure you never rose yer hand to me yet! And 'tisn't now, when you're all as one as come back from the dead, that—'

'Bring me my stick.'

The stick was brought, and down on her knees beside the big chair flopped the cowering wife.

'Well you know what you deserve. Well you know, you young thief o' the world! that if I was to take and beat you this blessed minute as black as a mourning-coach, 'twould be only sarving you right, after the mean, dirty, shameful turn you've done me!'

'It would, it would!' sobbed the girl.

'Look here!' gasped Tim, opening his breast and shewing an old tattered shirt. 'Look at them rags! Look at what you dressed up my poor corpse in; shaming me before all the decent neighbours at the wake! An' you knowing as well as I did about the elegant brand-new shirt I'd bought o' purpose for my berrin; a shirt I wouldn't have put on my living back—no, not if I had gone naked in my skin! You knew I had it there in the chest laid up; and you grudged it to my unfortunate carcass when I couldn't spake up for myself!'

'O Tim, darlin', forgive me!' cried Mary. 'Forgive me this once, and on my two knees I promise never, never to do the likes again! I don't know what came over me at all. Sure, I think, the devil—Lord save us!—must have been at my elbow when I went to get out the shirt; tempting me, and whispering that it was a pity and a sin to put good linen like that into the clay. Oh, how could I do it at all?'

'Now, hearken to me, Mary,' and Tim raised the stick and laid it on her shoulder. She knew

he wouldn't beat her even if he could with his trembling hands; but she pretended to wince and cower away. 'Mind what I say. As sure as you do me the like turn again, and go for to dress me in those undacent rags, I tell you what I'll do—I'll walk.'

'O don't, Tim, don't!' shrieked Mary, as pale as ashes. 'Murder me now, if it's plazing to you, or do anything to me you like; but for the love of the blessed Vargin and all the Saints, keep in yer grave! I'll put the new shirt on you; my two hands 'll starch it and make it up as white as snow, after lying by so long in the old chest. Yer corpse will look lovely, never fear! And I'll give you the grandest wake that iver man had, even if I had to sell the pig, and part with every stick in the cabin to buy the tay and the whisky. I swear to you I will, darlin'. There's my hand on it, this blessed night!'

'Well, mind you do, or 'twill be worse for you. And now give me a drop of wather to drink, and put a taste of sperrits through it; for I'm like to faint with thirst and with weakness.'

Mary kept her promise; for such a wake was never remembered as Tim Scanlan's, when, soon after, the poor man really did depart this life. And the 'get up' of the 'elegant brand-new shirt' in which the corpse was arrayed, was the admiration of all beholders.

CARRIER-PIGEONS.

THE value of these birds as carriers of messages was interestingly demonstrated at the siege of Paris, as it used to be in the French war seventy years ago, before the invention of the electric telegraph. It now appears that carrier-pigeons may be employed with advantage in taking messages from boats engaged in the Scottish herring-fisheries, when no species of telegraph is available. The following notice of the fact occurs in the *Fishing Gazette*:

'The experiment which was tried last year of employing carrier-pigeons for the purpose of bringing early intelligence each morning from the fishing-ground of the results of the night's labour, is again being resorted to this season, and with the most satisfactory results. One of the birds is taken out in each boat in the afternoon; and after the nets have been hauled on the following morning and the extent of the catch ascertained, the pigeon is despatched with a small piece of parchment tied round its neck, containing information as to the number of crans on board, the position of the boat, the direction of the wind, and the prospects of the return journey, &c. If there is not wind to take the boat back, or if it is blowing in an unfavourable direction, a request is made for a tug; and from the particulars given as to the bearings of the craft, she can be picked up easily by the steamer. The other advantages of the system are that, when the curers are apprised of the quantity of herrings they may expect, they can make preparations for expediting the delivering and curing of the fish. Most of the pigeons belong to Messrs Moir and Son, Aberdeen. When let off from the boats, the birds invariably circle three times round overhead, and then sweep away towards the land with great rapidity, generally

flying at the rate of about a mile per minute. Two superior birds in Messrs Moir's possession have occasionally come a distance of twenty or twenty-five miles in as many minutes; and on Tuesday one of these pigeons came home sixteen miles in the same number of minutes. Another of Messrs Moir's pigeons flew on board the *Heatherbell* on Tuesday afternoon off the Girdleness, bearing a slip of paper containing the intelligence that the boat from which it had been despatched at 11.54 had a cargo of twenty-five barrels of herrings. The pigeons require very little training, and soon know where to land with their message. A cot has been fitted up on the roof of Messrs Moir's premises at the quay for the accommodation of the birds, and they invariably alight there on their return from sea.'

According to the London newspapers, there was lately an amusing experiment to test the flight of carrier-pigeons against the speed of a railway train. The following is the account given of this curious race, which took place on the 13th July: 'The race was from Dover to London between the continental mail express train and a carrier-pigeon conveying a document of an urgent nature from the French police. The pigeon, which was bred by Messrs Hartley and Sons of Woolwich, and "homed" when a few weeks old to a building in Cannon Street, City, was of the best breed of homing pigeons, known as "Belgian voyageurs." The bird was tossed through the railway carriage window by a French official as the train moved from the Admiralty Pier, the wind being west and the atmosphere hazy, but with the sun shining. For upwards of a minute the carrier-pigeon circled round to an altitude of about half a mile, and then sailed away towards London. By this time the train, which carried the European mails, and was timed not to stop between Dover and Cannon Street, had got up to full speed, and was proceeding at the rate of sixty miles an hour towards London. The odds at starting seemed against the bird; and the railway officials predicted that the little messenger would be beaten in the race. The pigeon, however, as soon as it ascertained its bearings, took the nearest homeward route in a direction midway between Maidstone and Sittingbourne, the distance "as the crow flies" between Dover and London being seventy miles, and by rail seventy-six and a half miles. When the continental mail express came into Cannon Street station, the bird had been home twenty minutes; having beaten Her Majesty's royal mail by a time allowance representing eighteen miles.'

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SEA-MONSTERS.

WHETHER the sea contains any creature at all answering to the popular idea of a 'sea-serpent'—that ophidian monster which is annually reported to have been interviewed by various crews and persons—is a problem which will only be solved by the actual capture of one of those visitors. There are, as will presently be pointed out, certain well-known true sea-snakes, the *Hydrophidae* of the Indian Ocean, which swim by means of their compressed fin-like tails; but whether these marine serpents will correspond to the 'sea-serpents' of popular tales, is a matter deserving further investigation. The wide ocean presents features well suited to tempt the imagination to stray into the wildest flights. Its vastness; the difficulty of exploring even a small portion of its surface, as well as its enormous depths; its capacity for containing the strangest and most gigantic objects that fancy can picture: these are attributes of the mighty deep that have ever attracted the attention and prompted the weird imaginings of man.

It is a curious fact that recent scientific research has revealed the existence in the sea, at the greatest depths, of most minute and wonderfully formed organisms, the beauty and rarity of which necessarily secure our admiration; but instances of animals of enormous size being met with beyond those already known, are few and far between. This fact may be accounted for by the circumstance that while it is easy to construct instruments for capturing the smaller creatures living in the deep, it is a very different matter to entrap and secure an unseen monster, whose very size must endow him with enormous strength. The whale, so far as we know, is the largest denizen of the deep. Whether it is possible that it can be equalled by giants of some other order or race, is the point which public curiosity is very keen to have settled.

The appearance of great snakes at sea is recorded by more than one old voyager; but it would seem to have been only of late years that the idea of their existence has been generally

confined to one, familiar to us all as the 'Great sea-serpent.'

In *Opuscula Omnia Botanica*, *Thomæ Johnsoni*, 1629, we have an account of a great serpent captured off Sandwich by two men, who found it stranded among the shoal water by the sea-shore. It is described as being fifty feet long, and of a fiery colour. We are also told that they conveyed the carcase home, and after eating it, stuffed the skin with hay, to preserve it 'as a perpetual remembrance of the fact.'

In David Crantz's *History of Greenland*, published in 1766, we have an extract (illustrated by a drawing) concerning the *kraken*, from the narrative of a Captain Paul Egede, supposed to be the brother of a famous Danish missionary of the same name. The kraken, it is however necessary to remark, is the northern name for a giant cuttle-fish, the existence of such a monster being now a matter of scientific fact.

'On the 6th of July 1734,' says this old seaman, 'as I was proceeding on my second voyage to Greenland, in the latitude of the Cape of Good Hope, a hideous monster was seen to raise its body so high above the water that its head overtopped our main-sail. It had a pointed nose, and spouted out water like a whale; instead of fins it had great broad flaps like wings; its body seemed to be grown over with shell-work, and its skin was very rugged and uneven; when it dived into the water again, it threw up its tail, which was like that of a serpent, and was at least a whole ship's length above the water; we judged the body to be equal in bulk to our ship, and to be three or four times as long.'

Eric Pontoppidan, Bishop of Bergen, celebrated in his days as a naturalist, though he never actually saw it or met any one who *had* seen it, believed implicitly in the great sea-serpent existing somewhere; and in his writings has a good deal to tell us about its ways and habits; and it is upon record that Sir Lawrence de Ferri, commander of the old castle of Bergen, not only saw the monster, but shot at it on the high seas, wounded it, was pursued by it, in its pain and

fury, so closely that he narrowly escaped with his life.

In 1801 there was cast ashore on the coast of Dorsetshire a snake twenty-eight feet in length and twenty feet in circumference; but this has since been alleged to have been a Basking-shark; and the same has been said of a great snake-like carcase that was beaten to pieces by a tempest, and cast ashore on one of the Orkney Isles in the autumn of 1809, and some fragments of which, the *Scots Magazine* for that year states, were lodged in the Museum of the Edinburgh University.

A very distinct description of the sea-serpent occurs in Dr Hooker's *Testimony* respecting it, and communicated to Dr Brewster's *Journal of Science*. About half-past six o'clock on a cloudless evening at sea, the doctor heard suddenly a rushing noise ahead of the ship, which at first he supposed to be a whale spouting, but soon found to be a colossal serpent, of which he made a sketch as it passed the vessel at fifty yards' distance, slowly, neither turning to the right nor left. 'As soon as his head had reached the stern, he gradually laid it down in a horizontal position with his body, and floated along like the mast of a vessel. That there was upwards of sixty feet visible, is shown by the circumstance that the length of the ship was a hundred and twenty feet, and that at the time his head was off the stern, the other end had not passed the main-mast. . . . His motion in the water was meandering, like that of an eel; and the wake he left behind him, was like that occasioned by a small craft passing through the water. . . . The humps on his back resembled in size and shape those of a dromedary.'

Dr Hooker states further, that the description precisely accorded with that of a serpent seen five years before by Captain Bennet of Boston. At a later period, three officers in Her Majesty's service—namely, Captain Sullivan, Lieutenant MacLachlan, and Ensign Malcolm of the Rifle Brigade—beheld a similar creature gambolling in the sea near Halifax; but they asserted that it was at least one hundred and eighty feet in length, and thicker than the trunk of a moderately sized tree. Nor must we forget the official account which was transmitted in 1848 to the Lords of the Admiralty, by Captain Peter McQuhae of Her Majesty's ship *Dadalus*, past which, he and his crew saw the great sea-serpent swimming merrily—a document which produced, or provoked, a learned paper in the *Westminster Review*; while Professor Owen asserted that what was seen from the deck of the *Dadalus*, would be nothing more than a large seal borne rapidly southward on a floe or iceberg.

Recently, the appearances of the serpent have been amusingly frequent and clearly detailed. He has been seen in the north seas and the south seas, and in many places nearer home; in the Firth of Forth, off Fife Bay and the North Foreland, off Hastings and the Isle of Arran, the Menai Strait and Prawle Point; and in 1875, a battle between it and a whale was viewed from the deck of the good ship *Pauline* of London, Captain Drevay, when proceeding with a cargo of coals from Shields to Zanzibar, destined for Her Majesty's ship *Leviathan*. When the *Pauline* reached the region of the trade-winds and equatorial currents, she was

carried out of her course, and after a severe storm, found herself off Cape Roque, where several sperm-whales were seen playing about her. While the crew were watching them, they suddenly beheld a sight that filled every man on board with terror. Starting straight from the bosom of the deep, a gigantic serpent rose and wound itself twice in two mighty coils round the largest of the whales, which it proceeded to crush in genuine boa-constrictor fashion. In vain did the hapless whale struggle, lash the water into foam, and even bellow, for all its efforts were as nothing against the supernatural powers of its dreadful adversary, whose strength 'may be further imagined,' says a leader in the *Daily Telegraph*, 'from the fact that the ribs of the ill-fated fish were distinctly heard cracking one after the other with a report like that of a small cannon. Soon the struggles of the wretched whale grew fainter and fainter; its bellows ceased, and the great serpent sank with its prey beneath the surface of the ocean.'

Its total length was estimated at fifty yards, and its aspect was allowed to be simply 'terrific.' Twice again it reared its crest sixty feet out of the water, as if meditating an attack upon the *Pauline*, which bore away with all her canvas spread. Her crew told their terrible story. But critics there were who averred that what they had seen was no serpent at all, but only a bottle-nosed whale attacked by grampuses!

In a letter to the London prints concerning this affair, we have another description of our old friend the serpent, as he appeared off St David's Head, to John Abes, mate of a merchantman, in 1863. 'I was the first who saw the monster, and shouted out. A terrible-looking thing it was! Seen at a little distance in the moonlight, his two eyes appeared about the size of plates, and were very bright and sparkling.' All on board thought his length about ninety feet; but as he curled and twirled rapidly, it was a difficult matter to determine. Captain Taylor ordered him to be noosed lasso-fashion with a rope; which John Abes tells us he got on the bowsprit to throw, but in the attempt, threw himself overboard. 'The horror of my feelings at the moment I must leave you to imagine,' continues this remarkable epistle (which is dated from Totterdown, Bristol, September 19, 1875). 'The brute was then within a few yards of me, with its monstrous head and wavy body, looking ten times more terrible than it did on board the brig. I shiver even now when I think of it. Whether the noise made by throwing the ropes over to save me scared him, I cannot say; but he went down suddenly, though not more so than I came up. After a few minutes he appeared some distance from us, and then we lost him.'

When next we hear of the sea-serpent after his adventure off Cape Roque, he was beheld by the crew of no less a ship than Her Majesty's yacht the *Osborne*, the captain and officers of which, in June 1877, forwarded an official Report to the Admiralty, containing an account of the monster's appearance off the coast of Sicily on the 2d of that month. 'The time was five o'clock in the afternoon. The sea was exceptionally smooth, and the officers were provided with good telescopes. The monster had a smooth skin, devoid of scales, a bullet-shaped head, and a face like an alligator. It was of immense length, and along the back was a ridge of fins about fifteen feet in length and six feet apart.

It moved slowly, and was seen by all the ship's officers.'

This account was further supplemented by a sketch in a well-known illustrated paper, from the pencil of Lieutenant W. P. Hynes of the *Osborne*, who to the above description adds, that the fins were of irregular height, and about forty feet in extent, and 'as we were passing through the water at ten and a half knots, I could only get a view of it "end on." It was about fifteen or twenty feet broad at the shoulders, with flappers or fins that seemed to have a semi-revolving motion. From the top of the head to the part of the back where it became immersed, I should consider about fifty feet, and that seemed about a third of the whole length. All this part was smooth, resembling a seal.'

In the following month, the Scottish prints reported, that when the Earl of Glasgow's steam-yacht *Valetta* was cruising off Garroch Head, on the coast of Bute, with a party of ladies and gentlemen on board, an enormous fish or serpent, forty feet in length and about fifteen in diameter, suddenly rose from the sea. Under sail and steam the *Valetta* gave chase. A gentleman on board speared it with a salmon 'leister'; on which the serpent dived, and after a time reappeared with the iron part of the weapon sticking in its back. The monster scudded along for some minutes, again dived, and was not seen afterwards. There is little doubt, however, that the animal which figured in this instance was a very large basking-shark (*Selache maxima*).

An animal of exactly similar shape and dimensions was reported as being seen in the subsequent August by twelve persons in Massachusetts Bay; and soon after on three different occasions in the same quarter by the crew of a coasting vessel.

In May 1877, the 'sea-serpent' would seem to have shifted his quarters to the Indian Ocean, which it must be remarked is the habitat of the true sea-snakes. On the 21st of that month, in latitude 2° north and longitude 90° 53' east, the monster was alleged to have been seen by the crew of the barque *Georgina*, bound from Rangoon to Falmouth. 'It seemed to be about fifty feet long, gray and yellow in colour, and ten or eleven inches thick. It was on view for about twenty minutes, during which time it crossed the bow, and ultimately disappeared under the port quarter.' A second account of this affair stated, that 'for some days previously the crew had seen several smaller serpents, of from six to ten feet in length, playing about the vessel.'

Strange as all these stories seem, it is difficult to suppose they are all quite untrue, for nautical superstition apart, we have the ready testimony of various men of education and veracity. That there is only one serpentine monster in the ocean, is an idea which the great disparity in the various descriptions would seem to contradict; and certainly the most astounding aspect presented by this supposed and most ubiquitous animal, was his form and size when seen by the officers of the Queen's yacht off the coast of Sicily; though it is somewhat singular that these gentlemen made no attempt to kill or capture the mighty fish, or whatever it was they saw.

By way of conclusion to these remarks we may briefly summarise the chief facts presented by 'sea-serpent tales' as they appear under the light

of scientific criticism. There is, it must firstly be remarked, nothing in the slightest degree improbable in the idea that an ordinary species of sea-snake, belonging to a well-known group of reptiles, may undergo a gigantic development and appear as a monster serpent of the deep. The experience of comparative anatomists is decidedly in agreement with such an opinion. Largely developed individuals of almost every species of animals and plants occasionally occur. Within the past few years new species of cuttle-fishes—of dimensions compared with which the largest of hitherto known forms are mere pigmies—have been brought to light. And if huge cuttle-fishes may thus be developed, why, it may be asked, may not sea-snakes of ordinary size be elevated, through extraordinary development, to become veritable 'leviathans' of the deep? That there is a strong reason for belief in the veracity of sea-serpent tales, is supported by the consideration of the utter want of any motive for prevarication, and by the very different and varied accounts given of the monsters seen. That the appearances cannot always be explained on the supposition that lifeless objects, such as trees, sea-weed, &c. have been seen, is equally evident from the detailed nature of many of the accounts of the animals, which have been inspected from a near distance. And it may also be remarked that in some cases, in which largely developed sea-snakes themselves may not have appeared, certain fishes may have represented the reptilian inhabitants of the ocean. As Dr Andrew Wilson has insisted, a giant tape-fish viewed from a distance would personate a 'sea-serpent' in a very successful manner; and there can be no doubt that tape-fishes have occasionally been described as 'sea-serpents.'

On the whole, if we admit the probability of giant-developments of ordinary species of sea-snakes; or the existence (and why not?) of enormous species of sea-snakes and certain fishes as yet unknown to science, the solution of the sea-serpent problem is not likely to be any longer a matter of difficulty.

FROM DAWN TO SUNSET.

CHAPTER THE FIFTEENTH.

STRANGE and terrible tidings reached Enderby the day after that. As Deborah Fleming was standing in the red sunset, she saw old Jordan, in his scarlet waistcoat and shirt sleeves, running bare-headed towards her under the archway. Deborah went quietly forward to meet him, dreading and yet hoping, she knew not what.

'Master Sinclair's shot!' gasped the old man.

'Killed a-duelling!'

'Who shot him?' asked Deborah, with the blood coursing in a fierce wild tide of joy through her veins, and yet a sure foreboding of the truth. 'Who? Who?'

'Need ye ask, Mistress Deborah?' asked Jordan, shaking his gray head, and regarding her with a wild reproachful gaze. 'Why, Master Charlie. Who else?'

'But he killed him in fair fight, Jordan?' panted Deborah, with her hands pressed over her beating heart, and a loud ringing in her ears. 'No one

can blame him or touch him for that ! O Charlie, O my brother !' and she fell in a dead-faint at old Jordan's feet. He caught her up, and bore her in to Marjory ; with anxious earnest tenderness they cared for her. But Deborah was soon herself. Rousing, she saw the two old sorrowful faces ; and with a hand on a shoulder of each ancient lover, burst into a wild laugh of joy. 'Free ! free !' she cried. 'Free to act and think, and laugh and weep ! Charlie has set me free ! The old man is dead ! Oh, poor sad old man, *whither has fled his soul ?*—Jordan, is Charlie hurt ? Tell me truly ; is my poor, sweet, gallant, faithful Charlie hurt ? And she sat up, erect and resolute.

'No, no, my lamb ; he ain't hurt ; he's safe enow ; only he must be off for a time out o' this. Master Charlie has done for the "old fox," Mistress Deborah !' and Jordan began to chuckle triumphantly. Deborah laughed too, aloud. Marjory looked on scared and scandalised.

'Oh, am I mad ?' quoth Deborah, as she started up and began to pace the stone hall like a wild creature. 'Am I mad, that I care not for bloodshed, or that old man's hereafter, or anything, so long as I get freedom ? Free ! free !' she cried aloud in ecstasy, as she ran from one window to another laughing wildly ; and then, while the two old servants stood half-aghast, she sped away into the open air, into the sun—and liberty ! There, alone, on the green turf, under the waving trees, under the blue and boundless sky ; where chased the little white clouds like winged spirits ; while through all the beautiful demesne, where the birds were singing melodiously, and all nature was glad, Deborah Fleming wept her wild heart calm.

But Mistress Fleming ? Young Mistress Margaret Fleming ? She shed not a tear that day. With a heart relieved of a mighty weight, yet overcharged with anxiety, love, and fear, she watched till darkness fell, ever thinking of Deborah's wild and radiant face, till, late on in the night, or rather early morning, tidings were sent her of her love.

And where was Charlie Fleming then ? Far, far away—hunted by the dogs of vengeance and the law. Mounted on his good bay horse, he passed through Enderby that night, in his wild flight ; and as he fled, looked back, with hand uplifted to the high dim lights of Enderby, and bade it—a long adieu. Turrets, towers, and trees passed from him, like shadows in a dream. . . .

Deborah's trials were not ended. Where was her poor unhappy father ? Gone, gone again, ere she knew of it ; and she was terribly anxious about him—as to how he would take this news ; terribly anxious too, now that reason and calmness had returned to her, about her exiled brother, though Mistress Margaret had told her that he was safe out of England. Thoughts, wild and vague too, of her lover and kinsman haunted her. Where was he ? She had enough to drive her distraught ; but Deborah possessed a bold heart and iron will, and would not be subdued ; and

ever the glorious sense of recovered freedom made her heart throb with ecstasy of joy.

Some days after the duel at Lincoln, while Deborah was restlessly pacing the great lonely saloon, the outer bell rang. What now ? Tidings good or evil ? She felt prepared for anything that might befall. Old Marjory came to the door.

'Master Parry, Mistress Deborah,' and a small thin wizened man entered, with a bag in his hand. Deborah Fleming, from her stately height, looked down on the sly crafty face and shrinking figure, and with a woman's swift instinctive judgment, disliked and distrusted him. She bowed, ever so slightly. He, the cunning man of law and of the world, was half abashed and wholly uneasy at the full gaze bent upon him, and at the girl's bold and easy bearing. She waited for him to speak.

'Mistress Fleming,' he said with a low bow, 'at this sad time I must humbly apologise for this intrusion. I would have spoken with Sir Vincent ; but he is away, I find. May I venture then to address his daughter in his stead ? For my business, Mistress Fleming, is with you.'

'Certainly. Sit down, Master Parry, and say what you have to say.'

With another low bow he drew up a chair, and placing his hat on the table, and glancing first at the closed door, said in a mysterious tone : 'I come to you, Mistress Fleming, as the bearer of two great good pieces of intelligence ; one, I am sure will afford Mistress Fleming's generous heart great joy, and that I will reserve till last.'

Deborah bowed in silence ; her instinctive thoughts uttered 'Hypocrite !'

'Mistress Fleming,' continued the lawyer, still uneasy under that steady gaze, but still overflowing with polite urbanity and humble deference, 'I, as the sole executor of the late Adam Sinclair' (and his countenance lengthened visibly and his eyelids fell), 'have the pleasure of informing you that "Deborah Fleming" is left by his will the sole inheritor of all his property, landed and personal, unconditionally and without reserve.'

There was silence for a moment ; Deborah had started and then kept still and calm, while first a great horror of the dead man's gold, and then thoughts of her father and brother and Enderby, coursed through her startled mind. In that moment the lawyer Parry shot one furtive glance from his crafty eyes, and perceived her deep in abstracted thought ; and marvelled at her coolness and dignity, little guessing the combative thoughts that were surging in her breast.

'This was generous of Master Sinclair,' said Deborah. 'You have something else to tell me ?' She turned her eyes on him. He fidgeted ; he avoided her gaze ; he looked down, he looked out on the sky, he looked up at the carved chimney-piece, where grotesque faces grinned down at him ; he looked anywhere but at Deborah. It was but a slight tremor, a slight hesitation, only very quick eyes would have discerned it, under the flow of ready words : 'Yes, Mistress Fleming ; it relates to your brother, Master Charles Fleming ;

and though it is a proof sure and convincing that will clear him from a foul aspersion which has incidentally (*incidentally*, mind you) come to my knowledge; at the same time—and with deep reluctance I say it—it shews Master Sinclair in all colours, and casts bitter blame on his memory. But mark, Mistress Fleming; Master Sinclair was my oldest friend, my benefactor; what I tell you now, I tell you in confidence, and the secret had best perish between you, family and myself. But first I will shew what I mean. He then drew some papers from a bag, and spread them before Deborah's eyes, with his hands upon them. 'See, see!' he muttered, apparently trembling with sudden excitement, 'what Adam Sinclair and his myrmidons have done! And to get you in his power, Mistress Fleming! All to win your favour! I swear it, for I discovered them in the act! This writing you would say is your brother's? There too is his signature. But I hereby swear it to be a base forgery, and no more Master Fleming's writing than it is mine. This was a plot to throw dust in Sir Vincent's eyes, and disgrace on his son's name, by proving that Master Fleming had secretly raised money on this estate.'

'I know it—I know it all,' said Deborah, very white and calm. 'Cannot you tell me *who* wrote this?' And she laid her finger on her brother's name, and fixed her clear eyes upon the wrinkled crafty being before her, till they seemed to read his soul.

'I cannot inform you of that, Mistress Fleming,' he answered with sorrowful regret, and looked away, and up at the grinning faces that seemed to mock him, so that he glanced quickly away from them again.

'You are generous,' said Deborah; but a look of unutterable disdain was clouding those clear eyes with passion and with scorn. 'You will tell me thus far, but no further, not even this creature's name. Why, I would give all my new possessions, Master Parry, just to bring him to justice for this. But what is your purpose in bringing this paper to me? Am I to buy it of you, as Master Sinclair would have done, had not death taken him? I heard your name and his in connection with this matter; no other.'

Master Parry wished himself away from Enderby, and well out of it all, with a heavy purse. 'Mistress Fleming,' he said, 'what you suspect, or what charge you would bring against me, I know not. I only swear to you that I got possession of this paper by great and grievous trouble, and no small exercise of talent. The villain's name who compassed this forgery I cannot divulge; but if ye would shield the dead man's memory, save the honour of your name, and that of your father and brother, and prevent this paper for ever from seeing light—take it of me.'

'Ye do trade on it then?' said Deborah, still with those eyes and lips of ineffable disdain.

'Mistress Fleming, another trades with me,' answered the man of law, with a semblance of grave and dignified reproof and a glance of injured innocence. 'I have suffered much already in this cause, and small thanks I get. If I am not well paid therefore, this paper must go back to the owner, and he makes it public. If I am well paid, it is mine—it is yours—to burn, to do with it what you will.'

'I see now, Master Parry, why it is more con-

venient to negotiate with Mistress Fleming than with Sir Vincent. I am a woman. You can threaten me, and think to daunt me; but you shall find yourself mistaken. If ye are not this arch-villain himself, ye are playing into his hands. Why, I tell ye, girl as I am, and ignorant, I know the emptiness of your threats! To what end would this forged paper be published? What harm could it do Charles Fleming? To publish this!—and Deborah rose with a laugh of scorn, and struck her hand upon it—would be but to bring disgrace on him who published it—disgrace! ay, and death! My brother's innocence would be proved, and this man brought to the gallows. *No!* would ye have me buy it, Master Parry? Nay, you had better not, for I would have no mercy on the author of this villainy. *Destroy it!* Nay; I would publish it to all the world.'

'Ah, Mistress, ye know little of the world then, or of the results of such a trial. It might go hard with Master Fleming, I warn ye. But if ye will have it so, I'll e'en give this back, and let him work his will. He's not a man to be made a foe of with impunity. I sadly fear ye will me this rash act. I might have saved you. But be it, Mistress Fleming, as you will.'

With a savage consciousness of having been worsted, nay, utterly defeated, by a young and dauntless maiden, Master Parry stood with hat and bag in hand. Mistress Fleming had read him through. He had won neither gold nor favour from the future Mistress of Lincoln, only stern defiance and proud disdain.

How he hated her, but how blandly he smiled!

'I am not afraid,' quoth haughty Mistress Fleming; and looking beyond the lawyer and over his head, she bowed him calmly to the door.

One low reverence and a muttered curse between his teeth, and the doors of Enderby closed for aye on Master Parry.

Deborah was herself then. With thoughts collected and brows lowering she threw open all the windows; then standing on the hearth, she muttered: 'He has done it himself. I am trembling now with passion—only I would not vent it on a thing so mean—though my hands ached to be at him, woman as I am! Have I acted and judged aright? Oh, I know not; I know naught o' business; I cannot abide it. But I have acted a woman's part in this; not from pity, but because it would shame me to drag the name of Fleming through such mud. Only I was fain to shew the worm what I could do. O King, King! where art thou? O dear father; and poor, brave, gallant, honourable Charlie! Where, where is father, that I may tell him this great good news! O my precious brother, to think we should e'er have doubted thee! Well-a-day! I am a rich heiress—I am a great lady; I will pay all our debts; and Enderby—Enderby is mine! to give away to father and to Charlie! O wretched Adam Sinclair—poor perjured soul! Would your wealth not do such untold good! I would none of it. Honour and charity together shall wipe the stains from off your gold, and make it good for use.'

Sir Vincent came home late one evening, some days after Adam Sinclair's death. Some one, some careless tongue had told him suddenly that Adam Sinclair had met his death at the hand of Charles Fleming. He stopped at the lodge, and got off his horse feebly.

'Missress Dinnage,' said he, 'where is my boy Charlie?'

She gazed at him earnestly, then answered: 'He is gone away on a journey, Sir Vincent. He'll be home again before long.'

'Before long! Ah, he's a good boy to the old man, with all his faults, whatever they may say. Where's Adam Sinclair?'

She evaded that question. 'Come home with me,' she said tenderly; and unwonted tears lurked in the dark splendour of her eyes.

So, arm in arm, proud young Mistress Fleming and the poor broken-down master of Enderby walked slowly home.

Deborah saw them pass the window; and started forward and met them. But the glorious tidings of Charlie's unstained honour, the proud consciousness of power and position, the brightness in her eyes, and the bright colour in her cheeks, left her, on looking on her father. He stretched out his hands; there was terrible pathos in that feeble but impassioned gesture, and a sad and wandering smile replaced the light of intellect.

'Deb, little Deb! O my darling! I have been looking for thee. They told me thou wert dead! It shook me terribly. Thank God, thou'rt alive and well. And how is it with thee, my dove?'

'He is wandering,' whispered Margaret below her breath. 'We must nurse him, Mistress Deborah dear; he will soon be well.'

For Deborah, leaning her brave heart on her father's breast, was trembling like a leaf, and tears of agony were gathered in her eyes. Was that strong mind, that tender father's care, dead to her for ever? Would he never, never know the innocence of his darling, whose imagined treachery had stricken him thus? 'Father!' she cried, in piercing accents of despair, 'father! Charlie is innocent. Charlie never wrote that paper, father dear; but a bad man did it, forging Charlie's name! Charlie never, never raised money upon Enderby! He is as guileless and as true to thee as Deborah! Dost hear me, father? Dost hear me? Dost understand?'

He smiled at her vehemence, and stroked back her hair. 'Ay; I understand thee. Charlie is a good fellow, and our own dear brave boy. Though that running off from school, Deb,' he whispered, 'was the wild blood cropping up! Ha, ha, ha! *that* was a mistake; eh, Deb?' and he laughed vehemently again.

'O Mistress Fleming,' said Deborah, with her hand to her brow, 'this is harder to me than all. Margaret, Margaret! what shall we do? This is death in life.—O father, dear father! dost not know me? We have stood side by side in all our troubles, and now all trouble is at an end. We are rich! and Enderby, Enderby, father, is ours! We have money, father—riches, plenty! Charlie shall come home to thee—come home and live at Enderby! O sweet father, be thyself! Be calm, love, and God will restore thee, make thee well. Father, father, I am little Deb! Be my own dear father. Be thyself. Look! better times are coming, father, for Charlie and for thee! Wild, sweet, impassioned were Deborah's words and tones and looks.

Sir Vincent Fleming raised his hand to his head, and gazed all round, and gazed at her and Margaret. 'Deb,' he said, 'I am tired, very tired of

this world, dear love. Take me home, home to thy mother and to Enderby. I must rest.'

Pale and tearless, Deborah glanced at Mistress Fleming, and led the old man to his chair by the fireside. But for Mistress Fleming, she could see no more; her eyes were blind with tears.

CHAPTER THE SIXTEENTH.

That night Charlie's secretly made wife Meg Dinnage wrote and despatched a letter to Kingston Fleming, in this wise: 'Master Kingston Fleming, we are in a sore strait. Master Sinclair is dead; ye may have heard it. Master Charles Fleming is gone away. My Lady Deb is all alone, for her poor father is helpless on our hands. As ye are kind and true, come with speed to Enderby. You will be welcome.'

That same night Mistress Fleming and Deborah conferred long together, and talked themselves light-hearted about the future. Then said Mistress Fleming: 'Let me brush your lovely long hair, Lady Deb; for soon you will have a maid for this and a maid for that. Lady O' Lincoln Castle! Oh, who would have thought on such luck! I no longer hate the poor fox who has died and left you all, but pity him from my heart. Ah, Lady Deb, I wish Master Fleming could hear of this.'

'You know where he is hiding, Mistress Dinnage, but will not tell me.'

'Nay; I am under oath. But why should Master Fleming tell "Mistress Dinnage" his hiding-place?'

'Ye cannot blind me, Margaret; you are also a maiden; you are happy. Nay; come round to me, dear. The time has come. But my own selfish sorrows have kept me dumb hitherto. Margaret, you love him! He has spoken!' Deborah leaned back in her chair, gazing up, with her hair falling like a golden shower behind her.

Mistress Fleming, dark-haired, dark-eyed, blushing, drooped, till she sank and laid her head on Deborah's knees. The action was eloquent.

'And ye have kept this from me?' whispered Deborah, drooping over her. 'O Mistress Dinnage, Mistress Dinnage! but you shall be wedded now as soon as ever Lincoln's tragedy is blown over, and poor Adam Sinclair's fate forgot. Meantime, what doeth Charlie, dear? Speak! I will guard the secret.'

'He has gone to fight. He has 'listed with the Irish to fight against England. Ye have driven me to add to your sorrows, Lady Deb; lightning my own heart to tell you this.'

'O Margaret, Margaret! what could induce him to do this mad thing? Has he really joined?'

'A week ago.'

'And a private! O Charlie Fleming, this is a sore trouble, yet no disgrace. But you thought yourself a ruined man.'

'We must pray for him, Lady Deb. Oh, night and day he is my prayer. God guard him!'

'It is well father cannot know of *this*,' and Deborah fell into deep thought.

'Missress Dinnage,' said she suddenly, 'I was happy this morning: I heard from May Warriston.'

'I saw you did.'

'She told me news. Mistress Blancheflower was married a month ago at Naples to Count Mazzini. There was a very grand wedding.'

'What! Did she desert Master King Fleming then, for this foreign count?'

'Ay, she did!' said Deborah bitterly. 'I would not have believed it. And I taunted him, and called him false and a traitor, Mistress Dinnage, when he came over last and told me he was free. And now I hear that she threw him over so soon as the rich count appeared. Heaven forgive her! She has cost me much.'

'For naught,' added Mistress Fleming fiercely; and then Mistress Fleming thought, and laughed to herself. 'When Master King Fleming comes again,' she continued softly, 'you will not chide him then. No; you will be kind, for sake of those hard words. I like Master King Fleming dearly.'

'Nay,' answered Deborah, speaking coldly and blushing warmly; 'I have more to forgive than he. We both spoke hotly; but King said a hard thing of me anent my wedding Master Sinclair. We were both hot. But take my word for it, Mistress Dinnage, he will come no more to Enderby.'

'He will, and will be welcome too. He would make the Master his old self again; so father says, and I well believe it.'

'O hush, Mistress Dinnage, hush! He will come no more to Enderby, nor do we need him now.'

One long day passed; but another dawn brought Kingston Fleming. Mistress Margaret, eagerly watching from her window, saw him ride up, and was out before Marjory. As she stood in the early sun, he wondered at her beauty, though his soul was in another's. She held his horse; he wondered at her graciousness, little wotting that the girl's proud heart was all subdued by the same subtle snail that quivered in his own. She thought of herself no more.

'Thank ye,' said Kingston. 'And thank ye, dear Mistress Dinnage, for the little letter. Did Deborah know of that?'

'Nay; I writ without her knowledge. But she will welcome ye. Only try.'

'O Mistress Dinnage, I was hard and brutal with her.'

'She has forgot. Only try.'

'Where is she? And the poor old master?'

'Father, dear father, when he is himself, will be right glad to hear it. King, you once told me you would be proud of me if I were a grand lady. Now, ye have not a word of congratulation to offer me, though I am Lady of Lincoln!'

'How can I tell you?' replied Mistress Margaret with her old hauteur. 'His sister would better know; and turned away, as the scarlet blood dyed face and throat and hands.'

So Kingston sauntered round, just as if his heart were not knocking against his side with tumultuous love and desperate longing hope. There soon walked his sweet love into the garden. Little did Kingston, there watching through the trees, know of the great fortune that had befallen her, or he would have seen himself far enough away before seeking Deborah Fleming's ear. 'Hark! she is singing. She is passing close to him while she sings, his first—last—only love! She was looking pale and sorrowful, that sweet Rose of Enderby. O to pluck that fair Rose from the thorny stem of Enderby, and wear it for ever on his breast! As he gazed, Kingston Fleming felt himself capable of anything for her dear sake. His heart swelled with joy and triumph, to think that she was poor and lonely, and that he could have a place for her amongst the great ones of

the earth. He stepped forward, and faltered—'Deborah!'

'Deborah was taken aback. She stood, and first faded to a white rose and then flushed to a red, and not a word to say.'

'Deborah,' said Kingston Fleming, 'don't resent my coming. I heard of my uncle Vincent's illness—and, of Master Sinclair's death. Love I will not offend by word or look or deed; only bid me serve thee!'

'And hast forgiven me, Kingston?' faltered the girl, her passionate love pleading wildly within her breast, and quelling all else beside, forgetting utterly that she too had thought herself aggrieved.

'Forgiven thee, Deb?' asked Kingston, paling. 'Hast thou forgiven me?' I did thee grievous wrong; I knew my words were base and false, my noble one!'

'Ah, speak not of that, for heaven's sake! We were mad, King, and both maybe have been to blame in our past lives. We know all now; there is no secret between us.'

'No. If I know of Master Sinclair's death, you know of Mistress Blancheflower's wedding.'

'Dost know *all*, King?' asked Deborah suddenly, and tears and laughter were lurking in her up-raised eyes.

'Nay; what more? Naught will surprise me.'

'Charlie has cut himself off from England, and enlisted with the Irish rebels. Master Sinclair, little knowing my brother would kill him, has left me all his wealth and lands.'

Kingston started; he had frowned at the first tidings, but the last overclouded his brow like night. 'I knew naught of all this,' he answered calmly.

'Yes, King,' continued Mistress Fleming, with her old gaiety, 'I am a great lady now! It seems so strange for poor Deborah Fleming to be an heiress. But bethink ye: this will save Charlie; we will have him back soon!'

'Ay; it will save Charlie,' muttered Kingston thoughtfully.

'Why, you are not glad at my good fortune! Father, dear father, when he is himself, will be right glad to hear it. King, you once told me you would be proud of me if I were a grand lady. Now, ye have not a word of congratulation to offer me, though I am Lady of Lincoln!'

'I wish ye were aught else. Deb, I would ye were a beggar!'

'O loving wish! I have been beggar long enough. Why dost wish this? Tell me.'

'Because it is Adam Sinclair's gold; because ye owe all to him. But Deb, I must bid ye adieu, love, when I have seen your father. I came but for a few hours; I have business at Granta.'

'Always going! always gone! King, ye are like a wreath of smoke—ever evanishing in thin air.'

He wrung her hand, and turned away; yet he saw that tears were in her eyes. Deborah felt that if he went, he went for ever. The truth flashed upon her: he loved her still, but her fortune sundered them in his eyes. What should she do? Woo him? He knew not even of her love. She plucked a daisy from the grass, and gave it him: 'King, rememberest thou? "He loved me not?"'

'Who loved thee not?' And he stood and gazed upon her.

Trembling like an aspen leaf at her own bold-

ness, she answered tremulously: 'Why, Kingston Fleming.'

'Didst love Kingston Fleming *then*?'

'Then—now—and always!' And she sank upon his breast.

(To be concluded next month.)

SKETCHES IN VANCOUVER ISLAND.

VANCOUVER Island, which forms part of British North America, and stretches a length of three hundred miles along the coast of the Pacific, is still little known, although singularly attractive for its picturesque beauty, its fine climate, and its many interesting objects in natural history. The writer of this happened to be a resident in that beautiful island in 1876, and is able to say something of its scenery and products.

We were particularly struck with the grandeur of the forests. The huge dimensions of some of the trees fill one with amazement; nor is there less surprise at the profusion of gem-like berries of many varieties. The moist alluvial soil produces the delicious salmon-berry, in appearance a glowing jewel of gold; these, with cranberries, bramble-berries, currants, and a small black gooseberry, are very abundant. The most arid and rocky situations are often fairly black with grape-like bunches of the sweet sellal berry, which grows on a low hardy evergreen, and dehies frosts until late in the season. Another variety of the gooseberry, larger than the black ones, with a skin covered with a bitter and glutinous secretion, grows very abundantly on the dryer soils. Its pulp when ripe is similar to cultivated varieties. The red huckleberry, strawberry, and raspberry, with some others, abound in the gravelly pine-lands. Man's constant need of timber is abundantly met in these forests. The Douglas or red fir, a tough dense wood, attains a great size, and prevails almost universally. The red cedar, hemlock, spruce, white pine, balsam pine, and other useful conifers, are plentiful; while among deciduous trees may be mentioned maples, beeches, cherries, and oaks, which are more sparsely distributed.

To the lover of natural scenery few things are more delightful than a canoe cruise along this coast and among the intricate avenue-like channels which surround the adjacent islands. The rocky shores, mostly of a sandstone formation, are for miles wrought and carved by ocean tides and sands until they resemble fantastic Gothic architecture. The lofty snow-clad peaks of the neighbouring continent afford a sublime background to the clear azure sea and verdant grasses of the nearer coasts, whose inviting bays and tiny coves seem to bid the voyager to land and explore.

Both Siwash and Cloochman, as the males and females of Vancouver Island are respectively styled, ply the paddle and sail with great dexterity. Canoeing is their forte. Many families spend more than half their lives on the water, travelling immense distances, and boldly crossing wide straits in seas that are often boisterous. Most picturesque in its details is an Indian encampment, as seen every day in the vicinity of Nanaimo, Comet, and other settlements on the eastern coast. The capacious canoe is hauled beyond reach of tides, and if in sunny weather, carefully shaded, to prevent cracking. Everything needed for use is removed to the camping-ground.

A few poles and rush-mats form the necessary shelter. In making the mats the squaws (women) are very skilful, and form an ever-present and prominent adjunct to the Indian household. If the family have just returned from a successful hunt, they will probably have four or five deer to skin and dress; besides a dozen or two of grouse, a few ducks and geese; and often a seal, or elk, or black bear adds variety to the bill of fare. The skins of the animals are stretched, dried, and sold, together with such superfluous meat as can be disposed of. Two or three small wolfish dogs are generally to be seen tied up and eyeing the butchering operations with keen interest. Towards evening, presuming the necessary tasks have been accomplished, men women and children recline lazily upon their mats, and for hours make the night hideous with their peculiar clucking language.

Besides the substantial supplies already enumerated, Ocean furnishes with no niggardly hand his gleaming luxuries, of which the salmon forms the chief. In a fragile bark which holds but one, and can be lifted with one hand, Siwash or Cloochman starts for the salmon-grounds, often a mile or two from the village. Trolling a line of about twenty yards with a spoon bait or natural fish attached, he or she paddles at a moderate pace, carefully avoiding entanglement with sea-weed. The line being held with the paddle, each stroke of the latter gives the bait a spasmodic and life-like movement, highly conducive to success. Many salmon (of inferior quality) are taken in the rivers by spearing; and though the river-banks are frequently offensive from the number of fish that have died from injuries received in ascending to and returning from the spawning-ground, hungry bears and sea-fowl innumerable perform the scavenger's cleanly offices.

The natives have a peculiar mode of catching a small fish which resembles a herring, but is inferior to it in size. Taking a lath-like stick of tough wood, the edge of the end not handled being armed for several feet with thin iron spikes, they proceed slowly in search of their prey, using their implement like a paddle, and darting it rapidly through the finny droves. By this manoeuvre a dozen or two are frequently impaled at a stroke, and adroitly transferred to the canoe to be used as bait. Herring and herring-spawn are largely eaten, both fresh and dried, the spawn being obtained by placing fir branches in the quiet bays which the herring frequent. As soon as the branches are covered, the spawn is collected and dried in the sun. Halibut and rock-cod are also caught in these waters. Among shell-fish may be mentioned a poor apology for the oyster, which seldom attains a diameter exceeding an inch. Its near neighbour the clam atones for this deficiency, and is frequently got upwards of a pound in weight. Very dear to the heart of Siwash is this mud-loving crustacean, which plays an active part in rustic repasts. The bivalve is often smoked, dried, and put on long skewers; and together with dried salmon, forms an unfailing adjunct to the Indian cuisine. Besides the oyster and clam, the mussel, razor-fish, cockle, and a few others are found on these coasts.

The Vancouver Islanders are a broad-shouldered, stalwart race, though perhaps a trifle below the medium stature. On their 'reservations' a few families raise stock, grain, and potatoes.

This result, however, has not been obtained without much official encouragement. A few are employed as occasional day-labourers about the Nanaimo coal-mines, and some are employed more steadily by the miners underground. The store-keepers avail themselves of their services when they need porters. Many households also employ the women for washing, &c. A language called Chinook is learned both by whites and reds, for mutual convenience in trading and ordinary intercourse. This mixture of many tongues was introduced by the Hudson Bay Company, but can scarcely be called a classical language, being far more useful than elegant, English, French, and native dialects being among its constituent parts. Another remaining mark of Hudson Bay influence is found in the curious currency existing among these people. Probably no race has ever had so bulky a circulating medium as the ordinary blanket, which in the rude lodges of the richer chiefs is stored up by hundreds, and is everywhere acknowledged to be the token of wealth.

The squaws are cunning in the manufacture of water-tight baskets, which are used for many household purposes. Their bark canoes are also unique though simple in construction. Not only in canoe-building do the Siwash display their handicraft, but many of the villages are ornamented with grotesque carvings, apparently of heathen deities. At Comox and Nanaimo might be seen a short time ago poles two or three feet in diameter with fantastic figures carved one over the other nearly to the top. At the latter place a colossal painting of a fish resembling a salmon, though perhaps intended for a whale, confronted us as we approached the village from the water.

Weird and ghostly in appearance to the Indian burial-ground hard by this spot. Steering up towards the head of the broad Nanaimo Bay until the rising ground with its heavy forests casts darkling shadows over the waters, one sees two strange goblin-like figures, hideous with paint and ghastly protruding eyeballs, apparently keeping guard over this 'city of the dead.' By the side of each of these wooden figures are poles supporting white flags, which may be intended as emblems of that truce to evil thoughts which all humanity observes towards the dead. These simple children of Nature, like some who claim more refinement, seem sadly loath to be placed underground, many of the Indian corpses being laid upon beds and covered with blankets, while a rude wooden hut is erected around. Within reach of the dead Indian's hand is often placed a piece of tobacco; and food and water are added by loving survivors. The Methodists have laboured devotedly here, together with Episcopalians and Roman Catholics.

The aboriginal tribes of the island, now that they are being brought face to face with modern civilisation, are rapidly disappearing. Small-pox has reaped its thousands, and vice and intemperance their tens of thousands, among these and neighbouring races. In Victoria and other of the towns and settlements, one remarks the comfortable European attire of many of the Indians, particularly the younger ones, who seem to prize such apparel more than most of the Pacific tribes do. During the long winter evenings, men, women, and children will gather together in one of their capacious halls and hold their sports far into the

night. The hall, often more than one hundred feet in length and fifty broad, is brilliantly lighted and warmed by huge fires of bark or pitch pine; the fires being built on the earthen floor, three in a row on each side of the interior, and having an attendant specially detailed to look after them. Seldom more than one person dances at once. If a Siwash is performing, he is often decorated with a garland of feathers, with perhaps a panther or bear skin loosely thrown across the shoulders, and bells fastened around the ankles. His movements are agile rather than graceful, a succession of high leaps and bounds being often accompanied with dumb-show and singing, in which latter the audience join strenuously. When the broad-faced, good-humoured Cloochman (the literal meaning in Chinook of the last word is Goodman!) appears in the arena, her dress is often of the white cotton fabric, her features are daubed with paint, and her thick raven locks absurdly smothered in white downy feathers. She sometimes jingles an instrument like a tambourine, and from her movements appears deeply impressed with the motto 'Excellence'; but alas! her vast superfluity of adipose tissue and the forces of gravity combine to extinguish her lofty aspirations. If mortal eyes could behold a well-fed duck striving earnestly for gymnastic fame, its performances would probably resemble those of our lady-friend. No conventional ideas bid her to use the toe more than the heel in dancing. Upon making careful inquiries, the spectator will discover that the performers in these dances are generally in a kind of delirium, the result of severe fasting extended over many days. Their utterances are regarded as the inspirations of the Great Spirit, and the dancers doubtless obtain a tribute of reverence from their comrades in return for their privations.

Another peculiar custom is to hold a potlatch, or free distribution of gifts, at the principal villages every summer. Potlatch in Chinook signifies 'to give,' or 'a gift.' These meetings of many tribes are the scenes of much festivity. Clad in the skins of the bear, panther, wolf, beaver, eagle, or elk, Indians represent the respective animals, imitating their peculiar cries and other characteristics with wonderful fidelity to nature. When the time arrives, the chief and principal men among the hosts proceed to distribute large supplies of blankets and muskets, the latter being often thrown into the sea and fired for. Much honour is accorded to the greatest giver, and the chiefs need to be large-hearted as well as wealthy to retain their dignity.

When the writer of this sketch left the island, its mineral wealth was very considerable, and still continues to be so. Many thousand tons of the best coal on the Pacific coast were exported every month from Nanaimo and vicinity. Other large veins known to exist, were not worked, from a lack of capital and for other reasons best known to the proprietors. The Texada iron mountain, in the Straits of Georgia, together with other metallic deposits, may in the future claim the attention they deserve. When finished, the Canadian Pacific Railway will bring the right kind of emigrants to these shores, and doubtless more extensive quantities of arable land than are now cultivated will be found in the interior, when the demand for it is increased. The present race of settlers are a hardy, hospitable class of

men, expert with the axe, daring and dexterous canoeists, and very ingenious in meeting the continual difficulties and vicissitudes of backwoods life. Keen hunters are often to be met among them, men who are so successful with the rifle that their families keep a full larder without the aid of butcher or poulterer.

An enlightened system of free schools enables the widely scattered children of this island and of the other portions of British Columbia to obtain a substantial education at the public expense; and much credit is due to the energy and ability of the school superintendent, whose task it has been to organise and perfect the present satisfactory educational arrangements. We shall be glad if these sketches help to stir up an interest concerning this beautiful and productive island.

THE ADMIRAL'S SECOND WIFE.

CHAPTER IX.—TANGLED THREADS.

THERE is another listener to the song, and every word of it falls on his heart with intense meaning. It seems to him a lamenting wail of despair wrung out from aching hearts. The Admiral has returned from an official dinner-party, and when he reaches the drawing-room door, the duet is just begun. Rather surprised, and a good deal vexed at seeing Walter Reeves so soon installed as a familiar guest at Government House, he pauses, and the words of the song fall distinctly on his ear.

In bygone days, Captain Reeves was the only one amongst all Katie's admirers who really gave him uneasiness; and if truth must be confessed, he had often felt a pang of jealousy at the great attention Walter paid her, and by his unconcealed admiration of the young lady. He had made up his mind there was an end to all that now. His wife would henceforth be far removed from such influence; and when she and Walter should chance to meet, their acquaintanceship would be strictly ceremonious.

Yet now, they have taken up the old strain, and are already deploring in doleful song the hard fortune that has divided their lives. Sir Herbert has no idea of pretence or mere acting or of singing for effect. He is true to the 'heart's core' himself, and would not deign to seem other than he is. The words come to him with terrible meaning, and rouse him to sudden awakening. Has he spoiled their lives? While he would shield his wife from every rough wind and from all that could vex and annoy, has he only been driving her to despair? The guests are all so occupied that they do not notice the Admiral at the door, nor do they see him turn away with bowed head and a weight like an added ten years pressing on his heart.

Are Laura's words proving true? Has Katie only married him for wealth and position, while her heart has been given to Walter Reeves? Is she growing weary already, and pining in her gilded chains? Terrible thoughts these! They eat into his very soul, and crush him down as he has never been crushed before. He is only thankful no one sees the storm of agony that sweeps over him, while the merry music still goes on up-stairs.

Why did he not tell Katie then? She would

have flown to his arms, and assured him, truthfully enough, that she has grown to love him better than any one else in the world. Pleasure-loving, thoughtless, she may be, but no thought of disloyalty to her husband has ever entered her heart. But the Admiral asks no question, gives no sign, only shrouds himself up with a proud man's reticence and reserve. Though deeply hurt and wounded, he goes on his way silently, and Katie never for a moment suspects that she is making him wretched.

The next morning Walter arrives, and all the others who are to take part in the entertainment arrive also; so the rooms are again crowded, and the rehearsal goes on with spirit. There is a sound of music and talk, of song and discussion. Peals of silvery laughter burst forth; snatches of various airs are heard; Major Dillon's voice loud and prompt; Liddy Delmere's, clear and ringing. All are excited; and Walter Reeves, from his experience on the subject, is voted by all, chief authority and general manager.

Nothing loath to bear the honour, he makes even the consequential Major play second-fiddle to him. He flirts with Liddy, while she purposely goes wrong, to be set right by him; and Katie smiles more than ever at the rapid friendship springing up between the two. It is on this scene of distracting confusion that Sir Herbert looks, as he returns home an hour earlier than usual. He glances gravely round on the busy groups, who are all talking and laughing together, and cannot understand what they are about in the broad daylight, turning the quiet matter-of-fact no-lay into the revelry of night. His greeting to the guests is rather formal; there is a faint reservation on his lips, a slight furrow on his brow. He listens to the allusions and watches the eddies. In fact the guests, his wife, and the others to him to have gone a little out of their senses. At last the visitors decide it is time to do so, and they go off in high spirits, promising to gain there in the evening.

Sir Herbert has all that morning been thinking himself to task for his hard thoughts about Katie; but resolves to atone by paying her more devoted attention. What would he not do to win her back! No sacrifice can be too great, he thinks; so he begins by coming home an hour earlier than usual, only to find fresh annoyance and disappointment. When the guests are gone, he turns his grave inflexible face to Katie, and says: 'I came back early, my darling, on purpose to drive you to Belton Park.'

Lady Dillworth is gathering up the pen-and-ink sketches of costumes, glancing at each, and mentally considering what jewels she will use to adorn the highly ornamented stomacher of Lucy Ashton's blue dress, so she replies quickly: 'I'm sorry you fixed on this morning for a drive, Herbert, for I cannot possibly get away; I've no end of music to try over.'

'Perhaps there will be time in the afternoon then. Lady Ribson leaves Belton Park in a few days, and I promised to introduce you to her.'

'Does she return to Scotland?'

'Yes. Had she not been so old and feeble, she would have come here to call for you.'

'Oh, I am so sorry about it, Herbert; but every minute of to-day is portioned out: I've a hundred things to do.'

'Katie, I very much wish you to know Lady Ribson.'

'I know, I know; and I wish it also; but our meeting can't be to-day. Don't urge me, Herbert. This afternoon I'm to call at Madame Darcy's my dressmaker; she is to try to make some wonderful medieval robes for me.'

'Surely you are not thinking of having a fancy ball here?'

'No, no; only a charade party. But we are all to appear in apropos costume. There! that's the luncheon bell.—Liddy, are you ready?'

Miss Delmore has wandered off to the music-room, and has not heard the matrimonial conversation. She comes out radiant and gleeful, a smile on her lip, as she thinks of the pleasant morning she has passed, the pleasant evening still in prospect.

'Won't the charade party be nice, Sir Herbert? I wish you were to take a part in it.'

'Thank you, Miss Delmore; but my days of masquerading are over. Allow me to take you down to luncheon.'

He walks gravely down the broad stairs with the ladies. As far as the Admiral is concerned, the meal is a gloomy one. He eats but little himself, and joins but rarely in the conversation Liddy and his wife are keeping up. Sir Herbert does not like Miss Delmore. There is a mocking satirical manner about her, a tone of banter in her voice, an expression of raillery in her clear blue eyes, and a love of badinage in her thoughtless little heart, that he cannot understand. He can never distinguish whether she is in jest or earnest, and he is not the man to probe deeply into the character of one for whom he cares so little. He would fain see the friendship between Liddy and his wife die out; but with his morbid shrinking from interfering with his wife's plans or thwarting her wishes, he does not put his wish into words. When luncheon is over, Sir Herbert does not again allude to the proposed drive to Belton Park, and the subject appears to have passed from Katie's mind also, for when he goes out, she and Liddy decide about driving at once to Madame Darcy's.

After this, preparations for the charade party go on with great energy. Liddy is in her element, for Walter comes every day to consult and rehearse. The expensive dresses are ordered; invitations are sent out; the drop-scene is being painted by a local artist; and the crewlike solemn stately shades of Government House re-echo at all hours with unwonted strains of melody and mirth.

(To be continued.)

A LEGEND OF 'THE FORTY-FIVE.'

THE news of the expected landing of Prince Charles Edward Stuart in Scotland to attempt to recover the crown of his forefathers had reached a secluded glen, and many were the hopes and fears that animated the breasts of the Highlanders.

There dwelt in a small sheeling on the hill-side a young girl of eighteen, the only daughter of a Highlander. Her rare beauty and gentle manners had won her the admiration and approval of both young and old in the glen; many were the suitors that had sought young Flora's hand, and many were the sad hearts that had left the sheeling with the gentle yet firm refusal of the Highlander

lassia. Her companion from childhood had been young Donald of the chachan. The children had grown up together from their earliest years, had wandered among the bonnie heather brens, and sat beside each other in the primitive school of the glen, for years before either had known the meaning of the word love. On stormy days, when winds were high and the blinding snow-drift swept over the glen, young Donald would wrap the pretty child in his plaid, and though only two years her senior, seemed to consider himself the guardian of the mitherless bairn.

Thus years had passed away in all the innocent attachment of childhood. When the hours for play came, these children, instead of romping with the others in the school, would wander to some sunny bane and twine the purple heather in a necklet for the fair white neck of the little Flora, or to deck the blue bonnet of young Donald. Their natures seemed formed in the same mould—calm loving natures, cheerful and sunny, yet not impulsive, nor boisterous, nor cruel. Years had fled without a cloud to darken the sky of their young existence; Flora had fulfilled the promise of her childhood, and had grown in beauty both of person and mind. Hers was the same innocent and loving nature that had nestled in childhood beneath the plaid of the young Donald, who had now grown to manhood. A finer specimen of a young Highlander could not be seen; strength, agility, comeliness, and the proud bearing which is so native to the mountaineer, were his; but the artless confidence of childhood had been usurped by the deep strong power of love, and they met with more reserve as time went on.

Flora's father was proud of his only child, who so reminded him of her mother, his first and only love, that he had laid in the grave years ago. Proud of the admiration and respect that his child met with on all hands, he reasoned with himself that it was his duty as a father to endeavour to get his daughter to make a good match, which to his idea was a wealthy one. He had liked Donald, and encouraged him when they were children in the care he took of young Flora. But Donald was a shepherd, the only son of a widowed mother; and why should any foolish feeling on the part of Flora prevent her marrying some one of the well-to-do farmers who had sought her hand?

It was a winter's night; the fire was burning brightly on the hearth; and Donald, who had been spending the evening with them, had just left, when the first shadow came over young Flora's life. Her father spoke words which went like arrows to her heart, and brought tears to her glorious eyes. Donald was forbidden to come to the house again; and the name of a wealthy man whose suit she had rejected, but who had again asked her father for her hand, was pronounced with the sternness of parental authority to be the one he had selected for her future husband.

Flora loved her father, and at first only gazed at him with a look of incredulity; but the words were repeated, harsher and more stern than formerly. The tears were gone; there was an expression in Flora's eyes, not of anger, but it spoke volumes. She rose, kissed her father's forehead, and left the room.

Long hours passed ere sleep closed the tear-dimmed eyes of young Flora. Her love, her duty to her father on one side; her deep, pure, and virgin love for young Donald on the other: hard fate to

have to choose between. But the conflict was over; her decision was made. She had been truthful as the sun from childhood; and without thinking of it perhaps, her father had asked her to swear a lie at the altar of God, in pronouncing the marriage vows to a man whom she did not even respect, when her heart, her life, her love, were given to young Donald. It could not be.

'What am I to say to Erriek of the Bracken Braes, Flora?' said her father, in his most winning way, the following morning.

'Tell him, I hae nae heart to gie him, and that my heart and my hand gang thegither,' was the reply.

The Highlander swore an oath, and muttering he would have his own way, left the sheeling.

Next day was Sunday, and Donald and Flora met at the little chapel in the glen. He observed that his lassie looked sad, and was even more reserved than usual. 'Meet me at the Eagles' Cairn to-morrow, Donald, when I gang to milk the goats; ye ken the hour;' and with a smile she passed on.

At the Eagles' Cairn young Flora told her lover the stern decree her father had made. 'So ye mustna be coming again, Donald,' she said, struggling in vain to hide her emotion.

At the Eagles' Cairn there was a tableau: the distant mountains, the murmuring burn, the goats grouped around, and the collie dogs reposing amongst the heather; in the centre a youth and a maiden, his arm round her waist, her head resting on his breast. The first kiss of love had been given; their troth was plighted, and the fire-god shone on the scene.

The standard of the Stuarts had been raised, and the clans were marshalling to strike the most chivalrous blow that was ever struck on behalf of a fallen dynasty. Every sheeling was sending forth its men capable of bearing arms; and with heavy hearts, yet with all the pride of their race, the Highland wives, mothers, and sweethearts were placing the white cockade in the bonnets of their darlings. Sad was the heart of young Flora when Donald told her the news; she made his white cockade in secret, and gave it to him with a parting kiss at the Eagles' Cairn the night before that sad morning that saw all that was dear to her in this world, her father and lover, march down the glen.

Donald has asked Flora to take care of his mother, now that she would be left alone; and she had gone to live with the poor old widow, whose heart was nearly broken; but she shed not a tear as her handsome boy, arrayed in his tartan, marched away to fight for bonnie Prince Charlie.

Donald's Highland pride had felt bitterly the conduct of Flora's father, but for the sake of his heart's idol, he could not hate him. They fought side by side in the first battle at which the Highland army encountered the English forces. At a critical period of the fight, Donald beheld the stalwart form of Flora's father engaged in a hand-to-hand encounter with an English soldier; he had little doubt of the result of the contest, and the smoke that enveloped the scene hid them from his sight; as it for a moment cleared away, he saw the brave Highlander hard pressed by three of the enemy, and he rushed to his assistance. Ere he reached the scene of conflict, two of the English soldiers were lying on the ground; but in giving

the blow that felled the second, the brave Highlander had lost his footing; and before he could recover himself, the third closed with him and had him down. With a wild Highland yell, Donald sprang forward like a tiger, and buried his dirk between the shoulders of the English soldier, as he was in the act of using the prostrate Highlander's dirk, while he firmly grasped his throat with the right hand. It was the work of a moment to hurl the dead soldier off the Highlander; and Flora's father sprang to his feet, to recognise in the boy he had so harshly treated, the saviour of his life. 'Donald!' he exclaimed; but the brave boy had not waited for thanks, but hurried on to join his clan, in pursuit of the now routed and disorganised English army.

Time passed on, and Highland pride on both sides had maintained the coldness that existed between the two Highlanders. It was a lovely morning when the two armies were again drawn up in order of battle, eager for the coming fray; the wild slogan of the bagpipe, the waving plumes, and flowing tartans on the one side, and the serried ranks and scarlet uniforms of the English army on the other. Its tale has oft been told. The fight was over; the impetuous charge of the Highlanders had carried everything before it, and the English army was in full retreat.

Beside a rude couch sat young Donald, who with the exception of a sabre-cut on the shoulder, had come scatheless through that day of battle and victory. Not so Flora's father; he lay mortally wounded, his handsome features pale, and his broad chest heaving. He had clasped the boy's hand in his own, and spoke with difficulty: 'Donald, forgive me,' he exclaimed. 'I am wearing away: never shall I see the bonnie glen and the sheeling, or clasp again to my breast my ain dear lassie. Tell her that my dying words were seeking forgiveness from her, from you. Tell her that in health and strength, I thought mair o' riches than her happiness. God forgive me! Tell her that you saved my life; I, the wretch that would have wrecked both your young lives for gold; I that was so harsh with you. O Donald! tell her you gladdened the dying moments of her father, and that he gave her to you, with a dying man's blessing, as freely as she gave herself. Here a spasm convulsed his paleness, and he ceased from exhaustion. Donald sat with tear-dimmed eyes; his heart was full, and his thoughts were far away.

The dying Highlander's lips moved; his voice for a moment regained its old tone: 'Tell them in the glen that Alister died the proudest death a Highlander can die—fighting for his chief, his Prince, and Scotland.' A slight tremor over his frame, and the brave heart had ceased for ever.

We will not trace the varying fortunes of the Highland army; the sun of Culloden had set in disaster, the Prince was a wanderer, the clans routed and dispersed.

A young Highlander, pale and haggard, with his arm in a sling, was resting on a bed in the clachan; an old woman counting her beads, and a young and beautiful girl, were the only inmates of the room. The sad tale of death and defeat had been told. 'Yes, Flora,' said young Donald (for he it was); 'he gied ye to me on his death-bed. Will ye still hae me?' Young Flora's lips pressed those of the wounded soldier in reply. And Donald and Flora parted no more, till Death called one away; but the

parting was not for long—within three days Death called the other. Stalwart lads and bonnie lasses laid their parents beneath the old rowan-tree in the glen, full of years, and mourned by the country-side.

THE MONTH: SCIENCE AND ARTS.

THE usual holiday quiet has been animated by news of the discovery that the planet Mars has two moons—that a star in the constellation Cygnus is changing into a nebula—that Mr Stanley has made his way down the Congo to the sea—that Sir William Thomson has invented a chemical indicator which when attached to a sounding-line will tell the depth without stopping the ship, and that the ancient obelisk which has been talked about from the beginning of the present century, is at last on its way from Egypt to England. And now the quiet time is over; for colleges, schools, and hospitals have begun their scientific lectures; the learned Societies are resuming their evening meetings and discussions; the Royal Society have given notice that applications for aid from the funds for promotion of science voted by parliament must be sent in before December 31; and soon the men of philosophy and science will be as busy as the men whose talk is of merchandise.

Planetary satellites are a characteristic of our solar system, and now that the able astronomers at Washington have shewn that Mars has two moons, that mythological deity ceases to be exceptional. Neither in rate of motion nor in distance from the planet is there agreement between the two; for we are informed, by Mr Christie of the Greenwich Observatory, that 'the outer satellite revolves once in less than a day and a quarter, and the inner three and a quarter times in one day. The phenomena,' he continues, 'presented to an inhabitant of Mars must be very remarkable, for the outer satellite will remain above the horizon for two and a half days and nights, and the inner will rise in the west and set in the east twice in the course of the night. The lunar method of determining longitudes must be singularly easy with such a rapidly moving satellite, which is equivalent to the addition of a minute-hand to the celestial clock, which in our case has to be read by the hour-hand alone.'

Mr Christie tells us further that the two moons have been seen by observers at Greenwich, Paris, and other places; and he remarks, that if they 'have been in existence for ages, it seems strange they have not been discovered before, especially at the opposition of 1862, when Mars approached the earth as closely as this year; but it is naturally much easier to see an object that has once been found than to discover it independently. The satellites must be much smaller than any of the minor planets hitherto discovered. Can Mars have picked up a couple of very large meteorites, which have approached him closely?'

Leaving this question to the experts, we add, in passing from the subject, that the orbital velocity of one of the moons is seventy-nine miles a minute; of the other, fifty miles; and that their discovery has enabled astronomers to determine the mass of Mars, and thus settle what has been to them an important and long-standing problem.

As a reverse to this astronomical triumph, we have to record the death of Le Verrier, an astronomer pre-eminent among the astronomers of the century, with such insight and such capacity for work as have rarely been equalled. He will be known through coming ages by his theory of the motions of the planets, and the tables founded thereon; for provided with these, astronomers all over the world are enabled to carry on their work with an accuracy hitherto unapproachable, and to widen its application. France has lost one of her greatest sons, and Science one of her most distinguished elaborators; but he lives in his works, and through them will continue to guide and instruct the mariner, the astronomer, and the physicist.

Mr Stanley's exploit in turn settles an interesting geographical question, for embarking on the Lualaba, he followed that river down to the Congo, and the Congo down to the sea. Thus the drainage of the lake-region of Central Africa finds its way into the Atlantic. The voyage proved fatal to some of the party through conflict with hostile natives, and accidents among the cataracts, which on the equator impede navigation for a distance of thirteen miles. The river is described as from two to ten miles wide: it drains an area of one million four hundred thousand square miles; and now with the Congo and the Nile, Africa may claim two of the largest rivers in the world.

It often happens in dark weather that the position of a ship can be ascertained only by sounding; and when near the land, the soundings should be frequent if danger is to be avoided. But as the depth cannot be accurately measured without bringing the ship to a stand-still, the seaman is apt to prefer risk to loss of time; and the consequence is at times—a wreck. Sir William Thomson, to whom navigation is indebted for an important improvement in sounding apparatus, has recently proved by experiment that by adding thereto a chemical appliance the sounding may be taken while the ship is in motion. This appliance consists of a copper tube, attached to the lower end of the sounding wire, and inclosing a slender glass tube, and a small quantity of sulphate of iron. As the tube descends, the pressure of the water forces the sulphate into the glass tube: it leaves a stain on the glass; and according to the height of the stain, as indicated on a scale, such is the depth of the water. We are informed that this ingenious instrument has been tried on board the *Minotaur* with satisfactory proof of its 'absolute accuracy and extreme handiness.'

H.M.S. *Téméraire* is appropriately named, for she is big enough and heavy enough to do battle with any antagonist that may venture to face her in the Mediterranean, whither she is bound. The engines are 7697 horse-power. No wonder that the mighty vessel when under way pushes up a ten-foot wave at her bow! The diameter of the principal cylinders is seventy inches; of the crank shaft, twenty-two inches; from which an idea may be formed of the bulk of the ponderous mass. To reduce the weight as much as possible, wrought-iron and brass are largely used in the construction of the engines and fittings, in place of cast-iron, so that in the condensers there are more than eleven thousand brass tubes, which make up a cooling surface of fourteen thousand square feet. To assist the movements and facilitate the working of

this giant among war-ships, there are on board thirty-four small engines, thus distributed: two turning, two starting, four feed, two circulating, four fan, two bilge, one capstan, one steering, four pumping, four ashes lifters, two hydraulic gear workers, one torpedo reservoir charger, one to work the electric machine which feeds the lights on the bridge, and four others. In all this there seems something of complication; but we may hope that everything will work well even in the worst of weather, so that the ship may justify her name and the merits of her builders.

The Iron and Steel Institute held their annual meeting at Newcastle-on-Tyne, where, and in the neighbourhood, the manufactures and other mechanical operations abound in which the members take most interest. That these are mines, coking furnaces, brick-works, iron-works, and foundries, may easily be imagined. One of the papers read shewed that cast-steel could be produced without compression, and as readily as cast-iron; which if confirmed by further experiment, will prove of great value in the manufacture of heavy cannon.

In a visit to Sir William Armstrong's works at Elswick, the members saw the welding of coils for guns under the great steam-hammer, which weighs thirty tons, and falls upon an anvil of one hundred and twenty tons, with a stroke of twelve feet six inches; and yet so perfect is the hydraulic moving machinery, that it can be easily worked by one man. The four cranes too by which the ponderous masses of red-hot metal are lifted, are 'under the command of one man, who can sling them right and left, or move the load up or down just as he pleases without moving from his post.' Another example of what can be done by water was shewn at the swing-bridge across the Tyne, which has four spans of about one hundred feet each. The portion which opens weighs fifteen hundred tons. 'The hydraulic machinery for actuating it, is contained in the hollow pier which forms the pivot on which it turns. The pier is surmounted by a watch-tower, in which are the levers for opening and shutting the bridge. It takes just one minute to swing the bridge from its closed position across the river to the open one in line with the stream.'

Mechanists have pointed out that water-engines use the same amount of water when merely driving themselves (which is next to doing nothing) as when exerting their entire power. If it be true that there should be a proportion between the amount of work and the quantity of water, this, as we are informed, is provided for by Hastie and Company of Greenock in an invention by means of which an automatic lengthening or shortening of the stroke of the engine takes place, in accordance with the work to be done. No sooner does the engine become, so to speak, aware of the demand on its power, than it immediately adapts itself thereto without external assistance.

To revert to the Institute: A description was given of the coking coal-field of South Durham; it is thirteen miles long by eleven miles wide, and assists in supplying the present demand for fourteen and a half million tons of coke yearly. At one of the collieries there used to be a waste of three hundred tons of coal every week; but now by means of improved coking ovens, and intercepting the waste heat, this loss is prevented. It is found too that the large deposits of inferior coal can be utilised, by crushing, washing, and then

coking: a very important fact, for there is in all our coal-fields a large breadth of coal which has been hitherto rejected as worthless, but which will now be worked and converted into coke.

A paper was read which shews that ways are opening for the utilisation of slag: it is now converted into bricks, cement, mortar, concrete, glass, and cotton or wool. This wool is an excellent material for covering boilers and pipes to prevent waste of heat. Four million bricks have been made, which looks promising.

The *Journal* of the Institute contains descriptions of machinery with which we may fitly supplement the foregoing: At Smethwick near Birmingham, there is a screw-factory which, with its clever mechanical contrivances, is something to wonder at. All the sizes of screws used in carpentry and cabinet-making are made of iron wire chopped into lengths, and shaped in a series of self-acting machines. A blow on one end forms a head, which is speedily turned true in a revolving chuck, the nick is cut by a small circular saw, a revolving jaw then seizes the head, and the 'worm' or screw is turned in a twinkling; and in this way half a million screws an hour are produced. This seems almost incredible; but the screwing-shed alone covers nearly an acre and a half, and contains two thousand machines. These being self-acting, five or six can be kept going by one woman.

Another example from the same source shews the application of machinery to soft goods and tailoring: At a wholesale clothing establishment in Leeds, more than a thousand hands and three hundred sewing-machines are employed. The cutting-out is done by means of knife-machines driven by steam, which cut through thirty-five layers of thick or a hundred and twenty layers of thin cloth at once, the pattern being marked on the topmost piece. The pile, as is stated, is manipulated around the knife-blade, just as a block of wood is moved when being cut by a band-saw. Pressing-machines heated by gas are used in place of the old tailor's goose, and as they are worked by a treadle, the workman's hands are at liberty to guide the heated iron over the seams.

As our readers know, experiments with continuous brakes for railway trains have been made in England and America. We now learn from a published Report that similar experiments have been made in Germany, and that generally preference is given to the Westinghouse brake. All other things being equal, that must be the best brake which will stop a train within the shortest distance, and that this is done by the Westinghouse appears to be clearly established. This brake has been adopted for the state railways by the Belgian government; and that the question should be settled without delay is regarded as essential in all the countries where it has been tried. The Board of Trade in a recent Report take an unusually decided tone on this point. As the *Times* remarks: 'They not only constantly refer to continuous brakes as the great railway want of the day, but they also lay down, for the first time, the qualities which a continuous brake ought to possess. The chief of these are instantaneous action when applied either by driver or guard, automatic action, regular use in daily work, and uniformity upon different lines, so that when vehicles from one line are connected with the

trains of another the same brake-power may be available for both.' We are further informed that the Board have sent a circular to the railway companies with intimation that the sooner the requirements implied in the foregoing description are put into practice the better will it be for all concerned. There is common-sense in this: it will be read with satisfaction by all who travel by railway.

Social Science this year ventured into a high latitude, and held its Congress at Aberdeen, where the usual endeavours were made to promote health, wealth, and morality, which includes law. A paper read by Mr Caird on 'Economy and Trade,' chiefly as regards agriculture, will comfort those timid folk who are always looking for that troublesome time when all our foreign supply of 'bread-stuffs' shall be cut off. 'We grow at present,' he said, 'nearly one million acres less wheat than we did twenty years ago. We have only to revert to the acreage of 1856 to meet such a deficiency as would be caused by all Europe being shut against us. And beyond that, we possess in our immense breadth of pasture-land a never-failing resource of stored-up agricultural power, which could be at once applied to the production of corn, if from any circumstance that course became at the same time necessary and profitable.'

Mr Edwin Chadwick, a veteran among sanitary reformers, read papers on Cleanliness and Health and on 'House Accommodation,' which deserve wide diffusion and careful consideration. But it may be said of these, as well as of many other topics brought forward for discussion, that 'it is better to be in possession of a few important principles than a host of facts; then reflection and reason have elbow-room, and are not hampered and brought to a dead-lock, by cramming a disorganised mass of knowledge into the brain.'

Mr H. C. Russell, government astronomer for New South Wales, has published a descriptive, historical, and tabular account of the climate of that colony in an octavo volume of more than two hundred pages, with a map and diagrams. Although the colony is not yet a hundred years old, Mr Russell has been unable to fill up the gaps which unfortunately exist in the record of its winds and weather; but his book is interesting and valuable nevertheless. He discusses the whole range of meteorological phenomena: he tells us about the hot winds and where they come from; about thunder and hail-storms; about lakes, floods, and tides; about droughts; about the rains, and why they vary; and about the great swarms of moths which at times come in clouds and infest miles of country. In his description of the physical characteristics of New South Wales, he gives particulars which will be quite new and perhaps surprising to many readers. 'Within the colony,' he says, 'may be found all climates, from the cold of Kiandra, where the thermometer sometimes falls eight degrees below zero, and frost and snow hold everything in wintry bonds for months at a stretch, and where upwards of eight feet of snow sometimes falls in a single month, to the more than tropical heat and extreme dryness of our inland plains, where frost is never seen, and the thermometer in summer often for days together reads from one hundred to one hundred and sixteen degrees, and sometimes in hot winds reaches one hundred and thirty degrees, and

where the average annual rainfall is only twelve to thirteen inches, and sometimes *not* for a whole year.' Clearly there is more scope than was thought for settlers who like 'bracing weather.' In discussing the observations, Mr Russell is of opinion that a periodicity, or a tendency to cycles of phenomena, is discoverable.

How to prevent famine, will be for some time to come a very serious question in India; and while charity seeks to palliate the misery, science is trying to discover the laws of the rainfall, and to devise means of storing large supplies of water against seasons of drought. Examples are not wanting. More than a thousand years ago one of the kings of Ceylon erected a tank, Kanhalei, on a scale so enormous, that were it to be built now it would cost a million sterling. This tank is to be repaired and made available for irrigation. In another district the tank of Kalowewa was twelve miles long and thirty miles in circumference, inclosed by embankments sixty feet in height, and was kept full by two rivers which flowed into it from the hills. In the district of Manar the Giant's tank offers a further resource, and makes us aware of the pains taken by the natives to secure a sufficient water-supply in former ages. If India has not tanks enough for her wants, they must be built, for periodical famines are an opprobrium to Christian civilisation.

As regards Ceylon, we learn from an address delivered by Sir W. H. Gregory, the governor, that great improvements have been made in that fertile island: jungle and swamp have been converted into rice-fields or lakes; in Kandy there is a constant water-supply; fountains are set up in the villages; laws are in force for preservation of the forests, of the deer, buffalo, and elephant; the pearl-oyster, after some years' disappearance, has returned to the shores; a breakwater is in course of building which will convert the open roadstead of Colombo into a safe harbour, accessible to large ships at all seasons, and it is thought that in time Ceylon will become the great free port of the East.

Pitury is a stimulant said to be of marvellous power, and known to be used by the aborigines of Central Australia; but its origin has hitherto remained undiscovered. Last February, however, after vainly endeavouring for many years to obtain a specimen of the plant, Baron Ferdinand von Müller, Director of the Botanical Gardens at Melbourne, succeeded in getting some leaves; and after careful microscopic examination, he has shown that they are derived from the *Duboisia Hopwoodii*, which he described in 1861. This bush extends from the Darling River and Barcoo to West Australia, through desert scrubs, but is of exceedingly sparse occurrence anywhere. In fixing the origin of the pitury, a wide field for further inquiry is opened up, inasmuch as a second species of *Duboisia* extends in the forest-lands from the neighbourhood of Sydney to near Cape York, and has also been traced in New Caledonia, and more recently in New Guinea. In all probability the latter shares the properties of the former, as Baron von Müller finds that they both have the same burning acid taste. The natives of Central Australia chew the leaves of the pitury, just as the Peruvians and Chilians masticate those of the coca, to invigorate themselves during their long foot-journeys through the deserts. Baron von Müller is not

certain whether the aborigines of all districts in which the pitury grows are really aware of its stimulating power; but those living near the Barcoo travel many days' journey to obtain this, to them, precious foliage, which they always carry about with them, broken into small fragments and tied up in little bags. The blacks use the pitury to excite their courage in warfare, and a large dose has the effect of infuriating them. It is by no means improbable that experiments may show that by this discovery a new and perhaps important medicinal plant has been gained.

A STRANGE PAIR.

ABOUT half-way between Martinsville and Liberty Corner, Pennsylvania, hidden from inquisitive eyes by tall trees and dense-growing shrubs, stands a neatly built house of ancient date; the home of a pair of lovers of a quiet life, who, the world forgetting, by the world forgot, have dwelt there in a semi-hermit way for nigh upon forty years.

Samuel and Joseph Pooley, brothers in mind as well as in blood, claim kindred on their mother's side with one of England's wealthiest nobles, and boast direct descent paternally from a follower of the Norman, who settled in Kent. In 1823 they set up in business together in New York; and in the same year Samuel, the elder of the two, coming over to England, fell in love with a beautiful girl, and wooed and won her; at least it was settled that she should become Mrs Pooley so soon as the success of the New York establishment was assured. A second visit to the old country in 1834 proved less happy in result. Samuel was not prepared to take a bride home with him; and tired of living upon hope deferred, the lady declared off; and not very long afterwards put the renewal of the engagement beyond possibility by marrying a readier suitor.

From that time Samuel Pooley became another man. The brisk man of business, the ardent politician, the lively companion, lost all liking for society, politics, and trade. His brother sympathised with his altered mood; and when, a few years later, a legacy fell to them, they resolved to retire far from the busy city and its restless crowd, and live as men whom man delighted not, nor women either.

Four thousand dollars made the Pennsylvanian homestead and its hundred and five acres their own; and there they have abided ever since, never, except when necessity compelled, finding their way even so far as the neighbouring village. Twenty years ago a sister-in-law spent a day or two at the farm; but from that time to this no woman's foot has crossed its threshold. A New York reporter describes Joseph Pooley as a ruddy-complexioned merry man, with large round wide-open eyes, a long pointed white beard, and snow-white locks bristling up nearly three inches from his scalp. Samuel, better known as 'the Squire,' is seventy-three years old—two years older than his brother, and not so stoutly built. He sports a short tuft of iron-gray beard, jutting out abruptly between his chin and throat.

As the inquisitive caller came upon the pair enjoying the cool evening air in the garden, the raggedness of their raiment struck him as something simply perfect. Joseph was arrayed in a woollen shirt (or rather enough of one to suggest what it once

had been), a considerable portion of a jacket, and a very fair representation of the leading features of a pair of pantaloons; a pair of stout shoes and a gray felt hat of no particular shape completing his costume. As to the Squire's outfit, the facilities for ventilation were even greater than those enjoyed by his brother. His skin gleamed through innumerable rips and rents, to the great convenience of the mosquitoes, which he did not seem to notice; and his black felt hat was a more antique effort of the hatter's art than the gray one decking Joseph's head.

'It is unjust to say of them,' writes the note-taking visitor, 'as some do say, that they have not washed their faces or hands for ten years; they wash themselves when they feel like doing it. But seeing them, one would not find it difficult to believe that they had not felt like it for five years. At all events, this does not seem to be their year for ablutions.'

The consumption of water at the hermitage is not calculated to cause a scarcity of that article. 'On the table were standing a number of dishes of coarse yellow and blue and white delf, which had evidently just been used for supper. They always stand there, and they always have evidently just been used. Dish-washing is looked upon as a superfluous frivolity and waste of exertion. If perchance a sudden freak takes one of the hermits, just as he is sitting down to eat, that he would like to put on a little extra style, he wipes his plate with a bunch of grass or a piece of paper. But they are men of settled habits and seldom have freaks.' These Pennsylvanian disciples of Zimmerman would be at home among the dirt-loving Eastern Christians, whose domestic arrangements lately wrung from a special correspondent the declaration, that he would rather dine off a Turkish floor than a Bulgarian plate.

Like recluses in general, the Pooleys seem to be physically none the worse for contumacious cleanliness, being troubled with fewer infirmities than most men at their time of life; while, unlike the common run of solitarians, they have kept their mental faculties in working order by the constant use of a first-rate collection of books, their library counting up eight hundred volumes. Neither miserly by nature, nor compelled to be so by poverty, they are by no means anchorites; and if they do go raggedly clad, it is not from economical motives, but because they are comfortable in their tatters, and have no reason to study appearances, since those who know them care not how they are dressed; and for the opinion of those who do not know them they care nothing.

Said Joseph to the New Yorker: 'It may seem strange to you that we should exile ourselves in this way from the life of the big town, after such a busy life as ours used to be; but I assure you we see enough of life to content us here. The life of the birds, the bees, the waving branches over our heads, the flowers blooming about us, and the grass beneath our feet—all these fill our hearts with a quiet content; and here we are truly happy.' It is something to know that two men in the world have succeeded in attaining this degree of contentment, though not quite to be generally admired.

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THE GAELIC NUISANCE.

It is not a very creditable fact that after centuries of national consolidation, there should be communities within the British Islands who use different vernacular tongues and are ignorant of English. In other words, there are large numbers of persons who cannot in ordinary circumstances be directly communicated with. They can neither send nor intelligibly receive letters through the post-office. Summoned as witnesses on civil or criminal trials, they are in the position of foreigners, and stand in need of interpreters. Cut off from English books and newspapers, a correct knowledge of history, of science and art, and of passing events is scarcely possible. They necessarily vegetate amidst vague legends and superstitions. There is a life of stagnation and impoverishment, in the spot where they were born; for anything like voluntary emigration to improve circumstances is only exceptional. And all this has been complacently tolerated, if not pampered, for hundreds of years by a nation full of enterprise, and which, with no injustice, aspires to be in the front rank of general civilisation.

We are quite aware that much the same thing can be said of most of the continental nations. All are a little behind in this respect. The ancient Breton language survives in France, as does the Basque in Spain. Switzerland, Germany, and Russia are respectively a jumble of spoken tongues. In Holland and Belgium, we have the Dutch, French, Flemish, and Walloon. To accommodate the inhabitants of Brussels, the names of the streets are stuck up in two languages. These continental diversities do not greatly surprise us. In frequent wars, revolutions, conquests, annexations, along with want of means, and a host of inveterate prejudices to be encountered, we have an explanation of the strange mixture of languages and dialects which still prevails in continental Europe.

The case is somewhat different in the United Kingdom, where everything but old prejudices would seem to favour a uniform native language which all can use and understand. Yet, as we

have said, there exist communities who are still less or more ignorant of English. Centuries have rolled on, and notwithstanding all appliances, groups of people are yet found speaking a language which was common a thousand years ago, but now occupies an obscure and fragmentary position. We do not say that matters have not been advancing towards uniformity. Little by little, outlying communities have been satisfactorily Anglicised, not by anything like legal compulsion, but by what might be termed a natural process of assimilation. We may speak of two important cases. In the Shetland and Orkney Islands the Norwegian language existed until within the last two centuries. It is now totally gone, and the vernacular is a pure English; vastly to the advantage of the natives, who besides being open to common civilising influences, are prepared for pushing their fortunes in any part of the British dominions; some of them indeed making no mean figure in current literature. The other case is that of Galloway, a district embracing two counties in the south-west of Scotland, where the Gaelic prevailed longest in any part of the Lowlands. 'The wild Scots of Galloway' was once a well-known phrase. It has passed away along with the Gaelic speech. The Gallowegians—abounding in men of genius—are now a lively and prosperous English-speaking and English-writing people. For them the change has been a very happy one.

With a knowledge of these two instances of social improvement, there is the more reason to regret the protracted existence of non-English speaking races. No one will say that any good has come of the continued prevalence of Erse, the old Irish tongue; nor of Manx in the Isle of Man; nor of Welsh, though that, as regards literature, is considerably ahead of any branch of the once universal Celtic tongue. Considering what spirit is demonstrated in the way of books, newspapers, and otherwise, Welsh rises to a comparatively prominent position; but there always remains the unpleasant reflection, that interesting as the Welsh tongue may be, it distinctly mars national unity, and must be a drawback on those adhering to it

alone, and reared in ignorance of English. To this cause is doubtless attributable the lingering of many whimsical superstitions in the Principality.

Should any one desire to see what mischiefs are effected by adherence to a language long since out of date, he should visit some parts of the Highlands and the Western Islands of Scotland, where, by a well-meant but mistaken policy, Gaelic is still perseveringly maintained. Some years since, it was our fortune to pay a visit to Barra, one of the Outer Hebrides; and the feeling which rose in our mind was that what we beheld was a specimen of Scotland as it existed in the sixth century, when St Columba spread a knowledge of Christianity in the western Caledonian regions. We seemed to step back twelve hundred years. It was a marvellous kind of look into antiquity. In their language, in their rude dwellings of stone and turf, in their religious forms, and in their dress, the people belonged to a far-back age. Their existence was an anachronism. And the curious thing was to find this condition of affairs within four-and-twenty hours of Glasgow, with its enterprise and prodigiously busy population. We have seen the Micmacs living in a way little better than dogs in the wilds of Nova Scotia, but one is not greatly astonished to see Indians dwelling in a state of primitive wretchedness. The sentiment of wonder is raised on finding natives within the British Islands still living as their ancestors did at a time coeval with Vortigern and the Saxon Heptarchy. There they are, for anything we can see, unimprovable. Speaking Gaelic and nothing else, they, in their dismal isolation, are left behind in all ordinary means of advancement. Who has not heard of the institutions plausibly and benevolently set on foot to enlighten the aborigines of the Highlands and Islands? Well, here, after all that is done, things are much as they were in the era of St Columba—people living almost like savages, without the ability to hold intercourse with strangers, or the power to improve their circumstances, in consequence of knowing no other tongue than Gaelic. That language is their bane. It keeps them poor, it keeps them ignorant. So far as they are concerned, the art of printing might as well never have been invented. The intelligence communicated by books and newspapers is for them wholly unavailing. Practically, they are living hundreds of years before the ingenious discoveries of Gutenberg and Coster. To think that with all the costly apparatus of national education, such should be going on within the compass of the British Islands!

It is no use to mince a matter so grave in its results. The upholding of Gaelic as a vernacular tongue is, in our opinion, an error to be lamented and abandoned. In saying so, we are reminded that an effort has been made by an eminently enthusiastic Professor to gather funds for the purpose of endowing a Celtic Chair in the University of Edinburgh. To that effort, which is likely to prove successful, we make no special objection. Let Celtic, like any other ancient language, by all means be cultivated among the higher aims of philology. Students who like to pursue learned inquiries of this kind may do so. But it is a wholly different thing to maintain a system of elementary teaching in schools which tends to perpetuate Gaelic as a spoken tongue to the exclu-

sion of English. Apart from social intercommunication, there may be a difficulty in substituting English for Gaelic. Teaching to read English alone in Gaelic-speaking districts is said to be of little use. The pupils learn to pronounce the words without attaching any meaning to them. Impressed with this awkward consequence, the Society for the support of Gaelic schools, which has been in existence upwards of seventy years, suggests that the best way to promote a knowledge of and taste for English is to begin by teaching pupils to read Gaelic. 'The people,' it is represented, 'having once got a taste for learning, are not satisfied with their children being able to read Gaelic; a number of them pay the teacher for instructing them also in reading English and writing at extra hours.' There may be some truth in this view of the matter; but unfortunately we are confronted with the greater truth, that considerable numbers in the Highlands and Islands still speak Gaelic, and are ignorant of English to any useful purpose.

If it be absolutely necessary that schoolmasters must begin by teaching to read the Gaelic, they ought not to end there, but proceed to offer, by a close translation, the requisite knowledge of English. There are surely teachers qualified to make Gaelic-speaking children understand the meaning of English words. The trouble to be taken may be considerable, but there are few things either great or good which can be effected without trouble. We cannot doubt that Highland school-boards might find a way to make pupils understand English provided they have the will to do so. Indifference and the grudging of expense perhaps lie quite as much at the root of the difficulty as traditional prejudice. It is open to conjecture that, but for undue fostering, Gaelic would stand a fair chance of disappearing altogether from the Highlands and Islands, as it did in Galloway and elsewhere simply through the operation of natural causes.

The question, Gaelic or no Gaelic, has, we fear, been too long treated in a sentimental point of view. For example, we see it fervently argued that Highlanders should be able to understand and relish the ancient Gaelic poetry, as if an acquaintanceship with a few old songs and ballads were a primary concern in life. Poor people nailed to a sterile soil by their hereditary ignorance of English, are to be congratulated for their knowledge of some poem which the world at large never heard of, and does not care about! Happy people, to whom food, clothing, and cultured intelligence are as nothing in comparison to the enviable pleasure of singing a ditty ascribed to Fingal or some more modern and less apocryphal Celtic bard! It is gratifying to know that Highlanders themselves are a little scandalised by these and similarly absurd propositions. Sensibly, they observe that it is time to get rid of Gaelic, as being entirely out of date, and only an impediment. Two years ago, in a Glasgow newspaper, one who subscribed himself a 'Western Highlander,' took exception to the unreasonable clamour that had been got up for the maintenance of Gaelic as a spoken tongue. He says very rationally: 'We Highlanders have a language that, whatever its beauties, suffices merely for speech; a language by which we cannot acquire knowledge in art, science, history, commerce, or—if we exclude the Bible—even religion. With a poor and infertile

soil, we live alongside a people rich in every gift of nature, possessing every advantage that can insure worldly prosperity. We are debarred from all the stores of wisdom locked up in the English language. Thus heavily weighted, we cannot hope to rival our neighbours' wealth, but we can wish and strive to make the best of our opportunities. We intend to win our way by industry and thrift we can do it. We can endeavour to improve our infertile soil, to attract capital to our agriculture, to establish better communication with the rest of the world. Proud as we are of the mountain and the glen, we know that we cannot live by scenic beauty alone. We are tired too of kilted glory, and of dressing and acting up to Cockney sentiment about the savage Celt. We wish to recognise and study the conditions of existence, the methods of supporting life and securing comfort. And to do all this, if our much-loved language has become an impediment rather than a gain, why, let it go. We shall remain good Highlanders regardless of any particular mode of speech. At a time when the first whisperings of prosperity are beginning to reach us, when steamers deeper and deeper laden ply to every corner of the west, when the completion of a railway will soon make Oban a great commercial centre, when comforts hitherto undreamt of are everywhere obtainable—is it right as such a time of promise to intensify our disadvantages and to make our backwardness more backward still? Shrewd remarks these, well worth taking to heart.

It cannot be ascertained from any official Reports what is the exact number of persons—men, women, and children—whose language is wholly confined to Gaelic. In the second Report of the Education Commission published in 1867, it is said to be 'probable that the population of the parishes within which Gaelic continues to be the only language which is understood by the majority of the people cannot exceed a hundred and fifty thousand; these being chiefly the parishes of the Hebrides, which are wholly insular, and the mainland parishes of the west coast of the counties of Sutherland, Ross, Inverness, and Argyll.' It is believed that since 1867, the number whose speech is limited to Gaelic has diminished through various influences, among which commercial intercourse by means of steam-vessels and otherwise has been conspicuous. We should almost aver that Hutcheson's magnificent fleet of steam-vessels, whether devoted to the carrying of goods or passengers, had done more to introduce a knowledge of English, along with conditions of prosperity, into the Hebrides than any other appliance whatsoever. In the remoter or lesser islands which are little visited by strangers, there is a corresponding backwardness. Barra we have already spoken of as still in a singularly primitive condition. At Coll, Tyree, and some other islands, the knowledge of English is also unhappily deficient. In comparatively recent times, a great change in proprietorship has come over these islands. The old families—such as the Macneils and MacLeans—have mostly disappeared, and new landlords with the means and desire to improve the condition of the soil and the population, find themselves obstructed by the difficulty of holding any intelligent intercourse with the natives. The disadvantage is mutual, for on all hands the Gaelic-speaking inhabitants are unable

to make their wants and feelings known to those who wish to be their friends. A melancholy case of a rigid adherence to Gaelic, is that of the extremely remote island of St Kilda. Here, as was described a few months ago by Mr J. Sands in our pages, the natives speak Gaelic and nothing else; in Gaelic they are preached to by a minister originally from the mainland; and his wife being the only individuals who know English. Of course the natives can hold no epistolary correspondence with the exterior world, on whose sympathy they are forced to rely. A present of English books would be valueless, for they could not read them. They could not emigrate unless accompanied by an interpreter, much after the manner of a party of travellers in the East under the guidance of a dragoman. We ask, is that a position in which any of Her Majesty's subjects should continue to be placed through the effect of custom or prejudice? Such an afflicting condition of affairs is little better than a national disgrace.

It is hard to run counter to long-cherished and in the main amiable feelings. It is hard to find fault with persons and institutions whose motives in encouraging Gaelic have been, alike pious and benevolent. But circumstances oblige us to be candid in a matter so momentous to public welfare. The Gaelic language may be as copious and energetic as the Greek; it may be not less suitable for poetry than the Italian; it has strong archaeological claims as a relic of the tongue which in its various forms was at one time spoken all over the British Islands, if not over all Europe; but it has survived its usefulness, and is out of place as a vernacular. In short, looking to the wants of modern society, and seeing the mischief it produces, we are—however hateful the term—warranted in characterising Gaelic as a NUISANCE, which every one should aid in removing with all reasonable speed.

W. C.

FROM DAWN TO SUNSET.

By 'ALANSTON GRIMM.'

IN THREE PARTS.—PART II.

CHAPTER THE SEVENTEENTH.

No one but Mistress Margaret and Marjory knew that Deborah and Kingston Fleming were betrothed. Meantime Deborah, with her love-secret folded like a flower within her heart, devoted herself to her father, and Kingston remained with them. But Deborah's presence was required at Lincoln; the tenantry were anxious to welcome the new mistress; and like a dutiful daughter, fondly hoping that the change would restore her father, she determined, by Kingston's advice, to go there at once, and to leave Enderby to undergo thorough repair. So they left the dear old place. 'What will happen,' thought Deborah Fleming, 'ere I see Enderby again?' Mistress Margaret would not leave Enderby, for certain private and sufficient reasons of her own; so she pleaded to be left behind. She was in daily expectation of receiving a secret summons to follow her husband, and her heart clung to her old father and the old place.

They arrived at Lincoln Castle in the late summer gloaming. Groups of solemn cedars were just visible, and the little melancholy bats were flitting round like spirits; the grand old ivied

keep loomed darkly before them; and beyond, under a glimmering archway, were lights and figures. Deborah shuddered; she knew not whether to weep or pray, as she laid her head on her father's shoulder, and thought of herself entering in triumph as Adam Sinclair's bride. She felt a traitor, taking Kingston there, her lover, her betrothed, even though he was going away that night; and the grim presence of Adam Sinclair pervaded all the place. The same in the gorgeous rooms, gloomy though full of brilliant lights. On one side walked her tall kinsman-lover, and on the other stalked the spectre of Adam Sinclair. Deborah shivered, and clung to Kingston's arm. She went out with him under the stars to bid him good-bye. Two tall cedars met overhead, and the night-wind just sighed amongst their branches; the night-flowers were exhaling their fragrant odours.

'Deb,' whispered Kingston, 'I have half a mind to leave thee, love! Men of rank and position would flock to woo my beautiful one. Thou'rt very young. Wait; and let me come and know thy mind hereafter. *Wait*, Deb. I speak no jest. Wert thou poor, I would make thee wed me now; but love—as thou art—I cannot. Wait, Deb; and I will exact no promise from thee.'

'Thou never didst know me, King, and never will! My love was quick to come, but it was and ever will be changeless. Dear, I have seen many men; and more than thou wot'st of have made love to me. But what are they all to thee? From childhood, *thou* hast been my love; I feel no shame to tell it thee. And wilt thou, for my poor fortune, leave me? Why, thou dost tempt me to fling it all away as dross, rather than lose thy love. King, if thou leavest me, I shall *die*! For old kin's sake, thou couldst not! Remember that we are kin near and dear! Thy father and mine were boys at Enderby, and played in the same old haunts; companions near and dear. Ah well, King as thou lovest me, promise soon to come back!'

He took her face between his hands and hesitated. Perilously dear was she to him; but oh! that golden casket in which his jewel lay—he hated it! Kingston Fleming was proud where he loved.

'If thou wilt not promise,' said Deborah, 'thou shalt not go! I shall do the wooing!—Oh, I am too bold! But my heart saith thou lovest me. Then fling this pride away. King, darling, do not break my heart!'

He was vanquished. Vows, caresses, sighs, and the lovers parted.

PART III.—NIGHT.

CHAPTER THE FIRST.

The young and beautiful Lady of Lincoln won all hearts; not that she visited any but the poor in those days; but the fame of her beauty and sweetness spread abroad even so; and the 'Rose of Enderby,' though not to be seen, was known to be brightening the stern old castle. The tall gaunt farmer and the beautiful girl lived in utter seclusion, except when amongst the poor—always together. Strangely enough, he never tried to wander. She never had him left alone day or night; but he never seemed happy save with Deborah. And still she watched for and prayed

for a change in him. She talked to him, waited on him, sang to him from morning till night. Out in the broad sunny court that lay between the door and the entrance-gates, Deborah and her father, and often old Marjory with them, would sit and look up the long grass avenue that stretched far away, a vista of giant trees, ever twilight, where the antlered deer would trot past, to seek fresh shade and pasturage, and where the far-away murmur of country life, the lowing of cows, the tinkle of a sheep-bell, the bark of a dog, the shout of a boy, or the cries of children at play, would be wafted to them musically.

One morning, left alone, Sir Vincent said to his child: 'Where are we, Deb?'

Often he had asked the same question before; and she answered as before: 'At Lincoln Castle, father.'

But he went on: 'Who lives here?'

'You and I, father, and I hope Charlie soon. Adam Sinclair gave us this place. Wasn't it good of him?'

'Adam Sinclair?' He looked bewildered, and shook his head. 'I know naught of him, Deb. Deb, little Deb, I was thinking of Kate Shaw. I saw her yesterday.'

'Who was she, father, dear?'

He stared at her. 'Why, your mother!'

Her heart fluttered. 'My mother! And did you see her yesterday?'

'Ay; she was walking under the trees yonder. But she looked ill, sadly ill; her hair was as white as mine. She gave me such a look!'

Deborah went and kneeled by her father, and put her arms around him. 'Poor sweet father! This could not be. Thou knowest my mother died long, long ago. And was her name Kate Shaw, father?'

'Ay;' and he smiled. Wrapt and intent, his eyes seemed gazing far through and away. 'She was Kate Shaw, Deb; a gipsy lass, and beautiful as the dawn. No one like her! Such eyes, such feet, such grace! Sweet Kate! sweet Kate!'

Deborah knew that her mother's name had been Kate. She marvelled, trembled.

'I walked with her yesterday, Deb; didn't I? Yes; under the trees at Enderby; and I found she loved me. Little witch! She was hard, hard to win; so coy, so whimsical! She had a gipsy lover too. I made short work of him.'

'Didst shoot him, father?'

Sir Vincent laughed aloud, then feigned to look greatly scandalised amid his mirth. 'Shoot him? Fie, fie, Deb! Ask me not what I did, child. Why, one day she cared for him, the next for me. I could not stand it. A Fleming too! The Flemings woo maidens honourably. Pore heaven, I made Kate my Lady Fleming—my sweet little wife Kate! But I let her go no more to the camp. Sometimes I think she pines. She talks sometimes about her mother, in her dreams—that old hag! My wife must give up all, and cleave to me. Kate, Kate! dear love!' Then he said no more, nor did Deborah; but she marvelled at what she had heard, and what could have recalled her mother so vividly.

It happened one afternoon a few days after this and their arrival at Lincoln, Dame Marjory entered with a pale face. 'My Lady Deb, there's a poor woman round there at the gates wantin' to see thee; she is very ill. She lies there; 'tis like

she's dyin'; so Master Coleman thinks. She can't be moved away.'

'I will come,' cried Deborah. 'Send Coleman to father. I will speak to her.' Beautiful, pitiful, Deborah appeared in her long black robes to the vision of the dying woman, bending down to her. She was an old, old woman, with wild and wintry hair; death in her face, but life in her great burning eyes, and those were fixed on Deborah. Deborah started back. It was the gipsy! A hundred doubts and certainties rushed surging to her brain. The gipsy beckoned her nearer.

'Speak to her,' whispered old Marjory emphatically. 'Go nearer.' And then Marjory, standing by gaunt and grim, waved the other servants away.

Deborah knelt and bent her ear to the dying woman's lips. 'Girl,' said the faint voice, 'I forgive and forget! Let me die like a woman, not like a dog. I am thy mother's mother, an' I have been round day an' night to seek thee. She cast me off—Kate Shaw, thy mother. Because she was my Lady Fleming, she forgot her old mother. I was the dirt under her feet. Thy servants turned me off, Mistress. But take me into your grand house an' let me die in peace.'

Deborah rose to her feet, and turned like a ghost on Marjory. 'Nurse,' she whispered, 'is this my grandmother?'

'Yes, Mistress Deborah; it is true.'

Then Deborah beckoned to the men, and bid them bear the dying woman in and lay her on a bed. And then Deborah, with Marjory on the other side, sat down beside her. She seemed almost gone; the breath came labouring. But the breeze that swept in at the open windows seemed to revive her. It blew on the long white locks struggling across the brow; on those glazing eyes, so dark, sunken, piteous—eyes that burned up again, and sought Deborah's face as the embers of a dying fire flicker up and throw into the room an unexpected light.

'My girl,' she said, 'if Kate had been like thee! Hark! I hated, an' yet I always loved thee! Thou'ldst n'er ha' treated me like a dog. An', ah me! I loved her like my soul!'

'Grandmother,' answered Deborah sweetly and with a clear utterance, that pierced to the dying ears, 'my mother loved you. Only the other day I heard that great as she was, she never forgot you, even in her dreams. Day and night she thought of you; but her promise to her husband kept her from you, though she pined to see you once again. Oh, be merciful then! Forgive her! You are going now to meet again. O forgive her! that God may let ye meet in heaven!'

The great eyes stared not from Deborah's face. 'Shall I win to heaven, lass? Speak to me o' heaven.' And Deborah described to her that beautiful place, that land glorious with promise and with bliss, that 'eye hath not seen, nor heart of man conceived.' The dying gipsy listened with her soul in her eyes. Then said she, very faintly: 'I am goin'. O Jesus, let me come! O Kate—my Kate!' Then, with wonderful sudden life and fire: 'Hi! you, my lass! Where's the boy? the rogue—'wild Charlie' they called him. Where's he?'

'In Ireland. Gone to fight for the Irish, grand-mother.'

She laughed exultantly. 'Why, I tell thee why

—his mother was Irish, an' he knew it. Mad boy, mad boy!'

Deborah laid her white hand on the old brown trembling hand, and smiled. She watched to see again and again a strange look of Charlie in that faded face and those large and wistful eyes. A great new-born love was flooding Deborah's heart for the dying vagrant. But death was taking the wanderer away. 'O Jesus, let me come!' Deborah heard her say again.

The fire died out; the flame sank low; the embers of life just smouldered, nothing more. . . . The fresh wind blew in vain on the wild gipsy face. She was gone.

Scarcely had Katharine Shaw been laid in her grave when Sir Vincent Fleming became very ill—so ill, that Deborah despatched a letter post-haste to Mistress Margaret Fleming, begging her to make known the fact to Charlie at once. But Mistress Fleming had started for Dublin; and this is how it befell. One morning a letter came to her. She often received such; but this one had cost her a laugh and a cry of joy. Just as she was in the perusal, old Jordan entered, and stared in wonderment at the glorious happiness of her face. 'Why, my maid,' he said, 'what hast got there? It's naught but paper, is it?'

'No, dad; but something writ upon it. Father,' she said, and rose and slid the beautiful arm around his neck, 'haven't I been a good daughter to thee? Proud and purred up with mine own conceit, the lads o' the village have always called me. But, father, "Mistress Dinnage" has been a good daughter unto thee?'

'Ay, ay, lass, thou hast! What wouldst be comin' at? What ails thee now, Mistress?'

'Why, I come to ask thy blessing on me. Don't look scared, father; no shame will ever fall on thee through Mistress Dinnage. But I will out with it, for I can never beat about the bush. Father, I am Charles Fleming's lawful wife!'

Jordan seized his child by the shoulders, and his old grotesque visage grew dignified and terribly stern in its earnestness as he almost shrieked: 'Not—not unbeknown to the Master—an' Mistress Deborah?'

'Unbeknown that we are wedded, but not that we love, father. Mistress Deborah has known and wished it long; and Sir Vincent—he has seen us twice together, father, when we were walking secretly, an' has smiled on us. Mistress Deborah has heard him say a hundred times that he would fain, if he had wealth, have for his daughter-in-law an "honest poor man's child." So father, dear father, ye must not be angered.'

'Child, child! thou'st done wrong in keepin' it hid. Married? What—married? Honestly?'

'Ay,' was the proud answer. 'Charles Fleming and Margaret Dinnage went to Daxford Church, and were wed; we came out man and wife. Ask Master Hawdon. Father, he's in Ireland; but it's kept secret from all but Mistress Deborah. He's gone soldiering, father; and in this letter he asks me to go. Father, I am his wife!'

'Ay, an' Jordan's daughter, Meg,' said the old man brokenly. 'I'm a most dazed. And thou'rt goin' to leave the old man alone—alone!'

'Only for a little time, father—a little, little time; for soon Charlie, when all the trouble's over, will come home to Enderby. It's all arranged between Lady Deb and me. A fine home-comin'

it'll be, an' it please thee, Master Dinnage! Father, I won't go for long, dear. But o' nights, thinkin' o' Charlie, I well nigh go distraught. There is danger, father, as thou know'st! Hundreds o' men are slain. I must be *there*. I must go, dear; but I won't be long.'

'Go, go!' muttered Jordan ineffectually. 'Thou'dst alls the bit atween thy teeth, Mistress Dinnage; so had thy poor dear mother. Go along! I've no need o' thee; yon brave young fellow hath. Thou'lt be killed next, girl, killed, ay, an' wus than killed, at the hands o' the wild Irish. But, go, go! I don't want thee here.'

Anger, pride, and sorrow struggled fiercely in the brave old heart; but 'Mistress Dinnage' knew how to take him. 'Father,' she said, sorrowfully regarding him, with her head slightly on one side, and her hands playing nervously with her apron, in her earnest pleading, 'if thou wert newly wed, an' so parted from mother by land an' sea—an' she in trouble, needin' thee sore—thou'dst wade through fire an' water, only to win to her. My heart is broke in twain 'tween thee both—one half is at home with thee, an' the other gone to Charlie. Though I don't speak or cry, my heart is wounded with every man that's killed, an' trouble wears me sore. Think of mother, my father! Think when thou wert first wed, what it would be for one to part thee—think o' it, an' bid me go!'

So Mistress Margaret won the day.

OUR INDIAN PETS.

Among the many, many good things swept from India by the great Mutiny storm was the time-honoured order of Griffis—that is, officers under a year's service in the country. Every regiment owned one or two members, and in large stations they were usually to be found by the half-dozen. They were generally the life of the station, and in every way were our *prime* pets. What would Mrs General and Mrs Brigadier have done without their griffs to patronise and make use of in various ways, such as filling up sudden vacancies at their dinner-tables, or helping to fill their ball-rooms? Griffis invariably started Indian life with the three animals which are also included in the list of 'our Indian pets'—namely the horse or his humble representative the pony, the dog, and the monkey. No griff considered his establishment complete without these three animals; there would be a general uniformity among the monkeys; but a collection of griff horses, ponies, and dogs formed a rare aggregation of screws and cuds of all sorts, sizes, and colours.

There is a peculiar charm about Indian life which is rarely seen at home, and that is the compactness and domesticity of each establishment. In each household the master, and if he is married, his wife and children, is in direct contact with his servants and his animals; all are housed near him; and the daily morning stroll leads him from the stables to the farm-yard, then to the garden, and so home by the tree beneath which the monkey is chained, the dogs being in close attendance. The horses are brought up to be fed under their master's eye, and generally receive a crust of bread, a biscuit, or a chapatee (an unleavened wheaten cake like a panake; the 'unleavened bread' of Scripture) from his or his wife's hands; and the dogs have the free run of the house, and at

their stated hours have their meals under some one's eyes; while the farm-yard is under the direct charge of the mistress, who fusses about among the cows, looks after the eggs and chickens, and makes over the victims selected for the table. Then on the march we are in still closer contact with our servants and animals; for a few steps only separate us from all. Emerging from the tent, a few paces to the rear bring us to the cook's tent, and behind or beside it is that belonging to the servants. Behind them are our horses and dogs, the latter generally tied up during the day and loose at night.

So it happens that in cantonments, and more especially on the march, we are virtually monarchs of all we survey; and I well remember that in the pleasant days of my griffinage, on the occasion of my first march, I felt quite patriarchal as I sat in the tent-door with all my earthly belongings around me; the bearer (valet) and the other servants attending to their various duties, my dear Caboolie horse Tom dozing in the sunshine, my faithful setter Belle lying at my feet, and my monkeys Jacko and Moony busy with their own affairs.

And now to 'our Indian pets;' and I purpose passing some of mine in pleasant review; but in doing so I shall not record anything remarkable, or what any kind of observer of animals and their habits cannot fully indorse.

One of my first purchases was a horse we called Tom, a gray, thoroughbred, thick-necked, and sturdy Caboolie, for whom I paid ninety rupees (nine pounds); and right valuable did he turn out. I bought him in 1854, rode him from one end of the presidency to the other, through the Mutiny, and up to 1866, when I pensioned him. In 1869 he was attacked by black cancer, and at length I was sorrowfully obliged to put an end to his existence, to save him from a cruel, lingering death. There was nothing about him externally different from other thoroughbred Caboolies; but being made a great pet of, his mental abilities shone more remarkably, especially under daily observation. For instance, he had a strong sense of the comic. If I spoke to him when mounted, he would turn his head as much as he could and look at me; or he would take a cake or bit of sugar-cane out of my stretched-out hand, and munch it as he went along; or if I tickled one ear with my cane, he would unmistakably present the other ear to be similarly treated. He was a great thief, and I had great difficulty in restraining him from plunder when riding through crops. He was very fond of my wife's horse Punch, and neither would be stabled apart from the other; and it was most amusing to watch their nose-rubbings across the stall partition. Much, however, as he loved Punch, he would never allow him to precede him in the walk or canter, nor would he move until the dogs had been let loose and had jumped up to his nose. He knew his name perfectly, and would trot up to me when called, from any part of the field. He carried me unflinchingly through the Mutiny until wounded, and thought nothing of our weary rides of between thirty and forty miles a night.

On one memorable occasion we were escaping from a threatened attack, and I had dismounted to look at the girths; a shot from the rear elicited

the exclamation: 'I wonder where that bullet has gone to; and I again mounted, but had hardly gone two paces when Tom began to limp. I got off at once, and then found that the bullet had struck him just outside the off-knee, had run round under the skin, and lodged in front. I tried to cut it out then and there; but the horse was too restive, and I again mounted, but only to find the poor brute getting more and more lame. I was now well behind, and the rest of our party urged me to come on. As I still lagged they cried out to abandon the horse, as we were being pursued. This I grudgingly did, and trudged on hurriedly to join our party; having done this, I looked back, and saw poor old Tom hobbling after me. I could not stand this, so brought him on at once. When we reached comparative safety some days after, I extracted the bullet.

I have already mentioned Punch my wife's horse. He was ridden as a charger through the battle of Gujrat in January 1849, and with his rider, had a remarkable escape from a shell, which exploded between his rider's foot and his own off-shoulder. The wound inflicted left a scar, into the hollow of which you could thrust half a fist. He was a perfect lady's horse, and quite free from vice, possessing a gentle and affectionate disposition. He was fonder of Tom than Tom was of him, and used to exhibit great anxiety when, in his opinion, his friend was longer absent from his stall than usual, his return to which was greeted by a loud neigh of welcome. He has never seen so gentle or loving a horse. He quite understood the difference between adults and children, and would allow the latter to take all kinds of liberties with him, and was perfectly aware how to behave when they mounted him, as they always did when he returned from the morning or evening ride. He was a darling horse, and like true friends, his and Tom's best qualities came out under trial. Both had suddenly to exhibit their best points when the Mutiny broke out, and both behaved nobly. When Tom was disabled, I rode Punch, and during these weary days and nights he fully understood his position; many a time had we to snatch an hour or two of sleep when we could on the bare road; I would lie down with the bridle round my arm, and he would sleep standing beside me. One morning we broke down together, and both fell asleep while progressing, being rudely awoken by finding ourselves in a large roadside bush. Poor old Punch was subject to a disorder which eventually carried him off in November 1864, in the twenty-third year of his age.

Unlike Tom, he was hale and hearty to the last. Peace to the memory of these two humble and faithful friends! Several horses have subsequently been in my stables, and I might narrate something about each, did time and space allow, but none of them ever took our affections so completely as did Tom and Punch; they were our first and best equine loves.

Let me pass some of my dogs in review; and how tender are the memories which some of their names recall! Dear old Belle, an English brown and white setter, leads the way: she was too old for active service, had been left in the country by her former master, and had passed from one hand to the other, getting thinner and thinner with each change. When I got her she seemed to think a new master a matter of course, and accepted the

change without emotion; but when she saw that she had really found a permanent master and a comfortable home, then all her pent-up affection welled forth, and she seemed to feel that she could not shew enough of it. She was my constant and faithful companion in the early years of my service, and I felt her loss keenly when carried off by distemper, which on that occasion killed all my dogs. Her last acts were to lick my hand and feebly wag her tail as I bent over her prostrate form.

Belle number two comes on the scene: a small black and white spaniel, which I had as a pup. She was specially noted for an intimacy she struck up with another dog Topsy, and a cat; and the romps of the three were most amusing, but at the same time most destructive to a bed of melons they always selected for their invariable game of Hide-and-seek. The gardener protested in vain against their romps, though he allowed that Belle effectually protected the melon-bed from the jackals at night. She accompanied me in our flight in the Mutiny; but, poor little thing, was lost on the road. Topsy was a great pet; a very singular-looking little animal of a mixed breed, very peppery, full of life, and immensely affectionate. Her peculiarities were—intense antipathy to jackals, whose howl she would at once imitate if you called to her: 'Jackals, Topsy'; and the clear manner in which she articulated grand-mam—má-dá-d, if you interrupted her growing with your finger. She accompanied her mistress to England as a co-refugee from the Mutiny, and was made much of in consequence, returning to this country only to die prematurely, dear little Topsy.

Rosie! Rosie! Here is a small liver and white smooth terrier, very affectionate, and noted for her antipathy to musk-rats and squirrels; the former she invariably killed, and the latter she tried hard to, but rarely succeeded, as they were too agile, and always got up the nearest tree. I have had to drag her away from the foot of a palm-tree, at which she had been sitting all the morning watching a squirrel. Her first litter consisted of one pup, about which she made an immense fuss, and was inclined to resent a great liberty I took with her. I found one day a starving outcast kitten, and bringing it home, put Rosie on her side, and told her to be kind to it. The kitten ravenously seized a teat; and Rosie was very uneasy, not quite making out the animal which was draining her, and evidently suspecting it to be a squirrel. After a day or two she took to the stranger; and the kitten at once made itself quite at home; rather too much so, for she would claw at the pup most unmercifully, while it yelped complainingly, the mother not knowing what to make of the arrangement. But the tables were turned as soon as the pup got its teeth and legs; and then it fiercely maintained its rights, and there used to be regular scrimmages over a favourite teat; Rosie looking on in blank amazement, and winking under the scratches of her strange pup. The three pulled on together in a way; but there was never much love lost among them.

My monkeys Jacko and Moony I bought as a griff at Umballah for the large sum of one rupee. They were just emerging from babyhood, and so required some care and looking after. I never taught them anything; for such education, as with dogs, always necessitates more or less

severity; but I carefully cultivated the talents they possessed. The looking-glass was always a standing joke. Either monkey would cautiously approach its image, making the usual recognition grimaces, which of course were duly returned; then it would sit close up to the glass, and now and then look sideways at the reflection; or it would put a hand behind the glass, as if feeling for the other monkey. If I seized the hand, a fight with the glass at once ensued, which I kept up with my hand, and then suddenly dropped the glass. The amazement of the monkey at the sudden disappearance of its adversary was most ludicrous to behold.

Moony was very fond of a delicacy well known in India as mango-fool. The spirit of mischief induced me one day to add a teaspoonful of spirits of wine to her daily saucer of mango-fool, and for the first and last time in my life I saw an intoxicated monkey; her antics and attempts to keep the perpendicular were most absurd. She certainly attempted to dance and clap her hands, but ultimately was obliged gradually to subside and yield to the soporific influence of the spirits. As a great treat I used occasionally to loosen both monkeys and let them scamper up a large tree. At first they appreciated my kindness and came down at call to be tied up for the night; but the sweets of liberty were too great, and they gradually began to be tardy in their descent, and at last Moony preferred to spend the night in the tree. To prevent the return of such behaviour, I bombarded Moony next day with my goold or pellet-bow (a weapon with which in those days I was remarkably skilful), and soon brought her to my feet. Both monkeys were familiar with the goold, for I often harmlessly tested their agility by shelling them with it; but Moony now learned for the first time the punishment it could inflict; and ever thereafter, if I merely called out (when she hesitated to descend) to the bearer: 'Goold lao' (Pellet-bow bring), she would hurry down the tree repentant. This story savours somewhat of the American colonel and opossum; but it is strictly true.

Moony had her first young one when about fifteen months old; and the fuss she made with it, and the fierce affection she exhibited, were interesting to behold. Her babe was still at the breast when the Mutiny broke out. Among the ruffians who burned my bungalow was one who provoked her in some way or other. She attacked him at once, but was killed by one blow of a lathée (stout bamboo staff), her young one sharing her fate. Jacko escaped in the confusion, and became a vagrant.

A native gentleman once presented me with a black gibbon (*Hylobates agilis*), called by the natives from its yell, Hookoo or Hoolook. Its tremendous teeth and unearthly yell impressed me unfavourably, and I kept it in confinement, much against my will, as it always seemed so gentle. The poor brute soon died. Some time after, when staying with a dear and congenial friend at Alipore, near Calcutta, I became acquainted with a second gibbon, which was quite tame, and allowed to be at large. We at once exchanged confidences, and the poor creature's loving affection for me became quite overpowering. So thoroughly did I trust it, that I allowed my boy of three years of age to play with her, and the

way the two rolled over on the turf was most amusing to behold. The agility of the animal was simply marvellous. I have seen it go round the large house hanging by its finger-tips to the cornice beading which went round. To run up the rain-pipes was as easy to it as a ladder would be to a man; in fact, it could go anywhere and everywhere, and so often vexed us by its depredations. It found out where my boy's milk was kept, and helped itself in this strange fashion. Its great length of arm prevented it from drinking direct from the vessel, as monkeys do, the arms always intervening between the vessel and the animal's mouth; so she was obliged to sit at some distance from the vessel, and scoop out its contents with her fingers, letting the milk drop from them into her mouth. She did not drink from the hollowed hand, but let the fingers drip the liquid into the mouth. One day the gibbon had annoyed my friend by eating some of his papers, and in the afternoon we were conversing together in his study, when suddenly it appeared, and sidled up to me. With a half-angry laugh, my friend made a gesture as if to throw a book at it, and exclaimed: 'Get out, you mischievous brute.' She accordingly got out, in her silent mysterious manner, and we went on talking. We then adjourned to the roof for a view, and I drew my friend's attention to the gibbon, which was timidly surveying us from behind a distant chimney. Playfully shaking his fist at her, we walked together to the opposite end of the roof and leaned over the parapet. Presently I saw the gibbon stealing quietly towards us along the parapet. As soon as she that she was observed, she boldly ran up to me, threw her long arms around me, and nestled in my breast. Could I resist such an appeal for forgiveness and protection? We were both much touched by it, and winked at many of her subsequent misdoings.

So much for our principal pets: minor ones are cats, pigeons, parrots, cockatoos, minas, squirrels, and the mongoose. I might devote an article to each of these animals; but time and space warn me to stop.

THE ADMIRAL'S SECOND WIFE.

CHAPTER X.—ONLY TWO LETTERS!

At length the day for the party arrives. A hundred or more invitations have been accepted, and much expectation and curiosity is evoked at Seabright about the coming grand entertainment. Lady Dillworth's eagerness intensifies, and doubts spring up in her mind. What if the charade should prove a failure after all? She is nervous at having to sing in character, and angry with herself for her trepidation. She even tells Walter of her cowardice; and after the last rehearsal, as he goes away, she implores him to help her as much as he possibly can.

'Do, do come early, and manage everything, for I feel as if I were going to break down in the very midst. Recollect, the whole responsibility of making it a success rests on you.'

Walter promises all she requires; but Katie is not convinced, and her doubts increase as the time draws near.

The morning of that day does not begin auspiciously. A fierce storm has been raging for many

hours. When the Admiral glances over the newspapers at breakfast, his face becomes grave as he reads down the long list of disasters and wrecks. Presently the footman hands him a letter, and then his face becomes still graver.

'Anything wrong, Herbert?' asks her Ladyship.

'A ship aground on the Short Reefs,' replies he shortly.

'O dear, how dreadful! What is the name of the ship, Sir Herbert?' asks Liddy clasping her hands, and opening her eyes very wide.

'The *Daring*; and unless they get her off at the top of spring-tide, I fear she will go to pieces on the rocks.'

The Admiral drinks his coffee quickly, and prepares to leave the room.

'Where are you going, Herbert? You haven't taken half a breakfast.'

'I can't stay, Kate; for I must give orders about sending off help to the *Daring*.'

'Are any lives lost?'

'Not so far, I'm thankful to say. I hope we shall have her aloft before long; and he goes to the library with the letter in his hand.

Lady Dillworth is very busy that morning, and not the least of her engagements is trying on her 'Lucia' dress. Before she goes up to her dressing-room on this important business, she runs into the library to ask Sir Herbert what time he is to be home to dinner. But the room is empty. The Admiral must have been called out suddenly, for a letter, still glowing with wet ink, lies open on his desk. His wife glances at it in passing, then pauses, and bends over it closely. The words are few, written off in her husband's bold dashing hand, and the contents are evidently for her father. It is an order for the *Leo* to be despatched at once to the assistance of the unfortunate *Daring*.

Lady Dillworth stands alone. How can the charade party get on without Sir Herbert? It will be an utter disappointment, and she will be overwhelmed with mortification and vexation in the eyes of all her guests.

'Why did Herbert send the *Leo*? There are numbers of other ships; any one of them would do as well. The *Leoni*, for instance,' she exclaims half aloud.

In an instant the pen is in her hand, and with an impulse that seems irresistible she adds two letters to the *Leo's* name, and is surprised to see how exactly she has imitated her husband's writing.

'Of course I must tell Herbert, and explain why I did it. What will he think of my *daring*?' she asks laughingly, as she returns the pen to its place.

Then she goes up-stairs, and is soon closeted with her dressmaker; and the recollection of ships and all such matters is soon banished from her memory; for the dress is an odious fit! The alterations required are legion. Madame Darcy may be clever at fashionable modern dress; but in mediæval costume she has failed utterly. Katie waits patiently while the assistant, with scissors and needle, brings the garment into wearable shape. After the woman is gone, Lady Dillworth recollects about the letter, and returns to the library to tell her husband of the change she has made in it. But the letter has vanished, and the footman meets her with a message.

'My Lady, Sir Herbert told me to say he would not be home to dinner.'

'Did your master say where he was going?'

'No, my Lady; but the groom told me he was called off to Hillview, and was to go by the twelve o'clock train; and it's half-past twelve now, my Lady.'

So there is no help for it; the explanation cannot be given now; and Katie is fain to console herself by thinking that one ship is as good as another, and it can't matter much whether the *Leo* or the *Leoni* goes off to the rescue.

The day passes quickly. When it grows dark, Katie and Liddy, still in their morning dresses, and shivering a little from the cold, find their way up to Lady Dillworth's 'boudoir'—a cosy retreat, with its bright fire and closely drawn curtains. Here are Katie's books, her writing-table, and all the odds and ends that somehow gather in work-boxes and baskets. Here are periodicals uncut, for she has not had much time for reading of late, and drawing materials which are rarely touched.

On a round table near the fire is spread a delicately pink-tinted set of tea-things; and Dresden china baskets filled with tea-cakes and short-bread give promise of a dainty little meal. Miss Delmere, in a most becoming morning dress, with a warm blue shawl round her shoulders, plunges herself into the depths of a large arm-chair, places her feet on the fender-stool, and looks up brightly out of her merry blue eyes.

'How cosy this is, Kate! I'm quite enjoying it.' She pours a supply of cream into her fragrant tea and sips with keen relish.

'I wish Herbert were here,' sighs Katie in reply.

'Is he dining at Hillview this evening?'

'I hardly know, for he left no message about that; but I rather think he will dine at Belton Park, which is only a couple of miles from Hillview.'

'Is Lady Ribson gone back to Scotland yet?'

'No; she leaves Belton Park to-morrow; and I'm so sorry I have never once seen her, for Herbert is very desirous we should know each other. I believe old Lady Ribson is his *beau idéal* of what a woman should be. She is his god-mother; and her niece Bessie was his first wife.'

'You've never had time to go to Belton Park, Katie.'

'I know that; but I'm sorry now I didn't "make time," by setting other things aside. This hateful charade business has taken up every spare minute.'

'Hateful!' echoes Liddy reproachfully.

'Perhaps that is too strong a term; but the preparations have swallowed up all my time and everything else.'

'Don't begin to croak at the last minute. I mean to enjoy myself thoroughly!' exclaims Liddy, putting her cup down for more tea. Then she asks confidentially: 'Do you think Sir Herbert altered? Captain Reeves says he never saw a man aged so much in so short a time: he thinks the Admiral looks very ill.'

Lady Dillworth starts up impatiently: 'I don't know why Captain Reeves should think any such thing. My husband is *not* ill; I have never once heard him complain.'

'Ah! his is one of those grand reserved natures that would rather suffer anything than make a moan,' says Liddy, stirring her tea calmly.

'Why did you not tell me about Herbert's looking ill before, Liddy? I declare you make me quite uneasy.'

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'Oh, I daresay it's all imagination on Walter's part. I'm sorry I ever mentioned it,' Liddy replies quickly.

'You needn't regret telling me ; for if there is anything the matter, I ought to know it.'

Liddy is vexed at having introduced so disquieting a subject, for Katie remains silent and thoughtful during the rest of the repast, then goes languidly up-stairs to dress for the party.

CHAPTER XL.—THE CHARADE PARTY.

The bitter storm raging over the country, and spreading woe and terror and desolation far out at sea, does not much affect the expected guests. Carriage after carriage drives in at the gates of Government House ; and are long, many eager eyes are fixed on the drop-scene, the owners of them ready to be pleased or otherwise by the coming performance. Curiosity and criticism are on the alert ; some of the audience are just as much inclined to find fault as to admire. When Lady Dillworth 'comes on' she feels unaccountably agitated at seeing her 'dear friends' sitting in solemn state on rows of chairs, all ready to detect her slightest shortcomings. For the moment she feels as though she would fain dart away beyond their range of vision. But this nervousness speedily vanishes. Amidst the bursts of applause that greet her, she begins to catch somewhat of the spirit of a successful *débütante*, and her pulse throbs triumphantly. Her voice rings out in strains of pathetic melody ; she forgets her qualms, her trepidation, and almost even her own identity, so carried away is she by the intensely tragic music.

During the first part, the singing goes on faultlessly, then a somewhat awkward sense of failure begins to steal over the performers. Major Dillon and Walter differ about some minor points, and the former nearly bewilders the others with his eccentric proceedings. The chorus get out of tune, and the Major reproves them so vigorously that he nearly banishes all sense of harmony out of their heads.

Liddy Delmere is much amused, and she and Walter make themselves conspicuous with ill-timed mirth. This is unfortunate, as the irate mother of the hapless 'Lucia' should be grave and dignified. But Liddy forgets her part, the words and air and everything, and only remembers Walter Reeves is beside her. Lady Dillworth calls her to order with one of her haughtiest looks.

'Liddy, Liddy ! do be reasonable. Don't you see what wretched idiots we are making of ourselves ? We are only bringing down ridicule on our heads.'

Then in a pause, when she is not wanted to sing, Katie slips away to a room adjoining, that has been fitted up temporarily for the performers. She lifts the window-blind, and looks out on the rather grim garden, dimly lighted up with flickering coloured lamps. Dense clumps of evergreens glitter with raindrops, and cast deep uncertain shadows on the grass. The bare branches of the beech-trees are swaying wildly in the wind, and flinging themselves about like gaunt weird acrobats. Above in the troubled sky, heavy masses of storm-cloud are driven rapidly past, giving glimpses now and then of an almost full moon.

'Oh, what a fearful night this must be at sea !' muses Katie, and then a sudden shudder comes

over her as her thoughts fly off to the unfortunate ship *Daring*, perhaps even now wrecked broken up on the fatal Short Reefs.

'What have I done ? what have I done ?' exclaims wildly, as like a lightning flash, a sudden revelation of the possible result of her act morning comes before her. She has prevented *Leo* from going to sea by altering her husband's order ; her own meddling fingers have kept the very aid that might have saved the ship. *Leo* is at that moment safely riding at her anchor in Seabright harbour ; her captain is spending himself in delightful ease. But what about *Daring* ? Where is she ?

Even now the pitiless waves may be dashing over her, even now she may be lying on the sharp rocks. Perhaps the ship has been past is bearing on its wild wings the shrieks of sailors as they are hurled into the pitiless waters.

Ah, they may be crying the comes !—help, she has ludy, foolishly, wickedly kept ; me, souls, may be going to its ges-prime, with unrepented mind : she indirectly may be sending them to their end. The and we Lady Dillworth's mind the roof with a vividness that nation to whole frame tremble. Thus from as it sobb with wild viol shaking fancies she hears the crie of in agony amidst the suhe they are calling on her—of whirls and her heart beat.

'There is sorrow of the quiet.' O God ! help these distress—lay not their death for cries almost aloud, and then she low. Liddy Delmere watching her with al-

'O Lady Dillworth ! what is the matter and ill you look ! Shall I call. Shall I get anything ?'

'Be quiet, Liddy ; I insist. I feel faint. You need not proclaim the fact to the world.'

Katie covers her face with her hands, and for a minute trying to recover herself—try while the angry wind howls like an avenging in her ears. Presently she looks up : better now. What do you want of me, Liddy ?

'Have you forgotten our duet comes on this chorus is over ? Are you well enough ?' asks Miss Delmere, as she gazes amazement at Lady Dillworth's haggard and startled eyes.

'O yes ; I will sing. Don't be uneasy ; not break down.' She takes Liddy's arm, they make their appearance on the stage at nine. Much license has been taken with the of *Lucia di Lammermoor*—new songs and have been introduced, and it is one of the latter in which Katie is now required to take a part.

With a great effort she composes herself, and begins. As she goes on, her voice regains its rich fullness ; no one would suppose such a tempest of agony had so lately swept over her.

While she is sustaining a rather prolonged cadence, she sees the Admiral enter the room. He stands for a minute looking at her, and listening ; then he catches a glimpse of Walter

house, and goes quickly towards him. Though papermiddle of her duet, Katie notices the start reads island gives and the quick frown that Presser on his brow. She sees him beckon his face aside; the heads are bowed a moment as

'Aided whisper passes, then they leave the
'A together. Ere her part is over, she sees short, return alone, and quietly make his way

'O the groups of people till he gets near the the sloop, and there he takes up his position. handsment Lady Dillworth is free she is at his

'Thesioning and eager.
top saw Sir Herbert here a minute ago. Where the room?

The went out to find your father, for he said he pares to leave s' once. I offered to go; but Sir

'Where are you hear of that—How splendidly taken half a break—just, Lady Dillworth! Your

'I can't stay, Katsction'
about sending off help, see my father?' she asks

'Are any lives lost?'

'Not so far, I'm thast say; but something shall have her aloft befinn very much. I never the library with the letter, though he gave no

Lady Dillworth is very
not the least of her engast abruptly.

'Lucia' dress. Before she sea to-night, Captain ing-room on this important danger to ships?'

the library to ask Sir Harl. We haven't had such be home to dinner. But thinter. Every roar of

Admiral must have been congratulate myself on a letter, still glowing with There's a wonderful

his desk. His wife glangy scene, with its music pases, and bends over ky of youth and beauty,

few, written off in meet with out on the wild hand, and the content, at a charming evening you

it is an order for thDillworth!'
to the assistance of, keep herself from stamping

Lady Dillworth impatience, as she looks up at charade partyatisfied face, beaming with enjoy-

will be an men she watches the smile with which overwhelm bends down to whisper something

the eyes of mere. Liddy responds with a flash
'Wright blue eyes, and a heightened colour

numb, to her cheek as she makes room for Walter as we her. Never has she looked better than

half an evening; the quaint antiquated costume
In its capially with her fair laughing face.

an in the charade comes to an end; there is a lettered murmur of applause as everybody says

how cleverly it has all been done. They make
'Onesses at the word, and Walter has at last

I did claim the secret. Lady Dillworth listens to asks amments of her guests with an abstracted

Then, when the last carriage drives away, she with as the footman and inquires whether Sir

ships as has returned.
her meter is an old servant of the Admiral's, and

alterat loved his master's fortunes in various may bland homes, and was with him when the

in meady Dillworth died; so he knows his ways, and sees more than perhaps his employers give

him credit for. He turns a grave face towards his mistress, as he replies: 'Yes, my Lady.

Master came in just when the acting was over; and when he saw the company wasn't gone, he

told me to tell your Ladyship he was very tired, and would go to bed at once, instead of going

back to the drawing-room.'
'Very tired, did he say?'

'Yes, my Lady; and he looked weary-like.'

'That will do, Hunter. We want breakfast very early to-morrow morning, as Miss Delmere is going away by the first train.'

Then Katie goes up to her boudoir. The fire is still burning brightly, and the lamp is throwing a

soft light through the curtained room. Still in her fancy dress, the stomacher flashing with

jewels, she seats herself in the arm-chair; and there, while the warmth steals over her, she

covers her face with her hands, and thinks bitterly, confusedly—the loud shrieking of the

wind and the fury of the cruel storm keeping up a wild accompaniment to her musings.

She wonders what she had better do. Shall she rouse her husband from his slumbers, and tell

him all, or shall she wait till events call forth a confession? Never has she felt such a poor,

mean, despicable coward. She hates herself for her irresolution; and all the time her fancy

pictures up the surging whirlpools, the jagged rocks, the dashing waves, the yawning gulfs, and

the drowning men with their despairing eyes, ever calling for the help that does not come!

REMINISCENCES OF QUEBEC.

For the following reminiscences connected with the stay of one of the British regiments at Quebec

during the winter of 1870-71, we are indebted to an officer of the garrison. He writes as follows:

Until the close of 1871, Quebec was a fortress occupied by British troops; but before the winter

set in, the *Orontes* and other store-ships carried away the troops and their possessions, and the

stronghold passed for ever away from the rule of Great Britain.

Quebec, the principal fortress of Canada, also known as the 'Gibraltar of the West,' is built upon

the strip of land projecting into the confuence of the St Lawrence and St Charles rivers. Originally

a French settlement, it afterwards became one of the colonies of Great Britain, and has continued

to be so until the present date.
'There is but one Quebec, and its beautiful

scenery,' remarked a valued friend to the writer, as one autumn afternoon we scanned the view

from the Levis Cliffs, and watched the 'Fall fleet' preparing to depart for England ere winter

had closed the St Lawrence. 'The scenic beauty of Quebec,' says an old writer, 'has been the

theme of general eulogy.' The majestic appearance of Cape Diamond, surmounted by fortifications,

the cupolas and minarets, like those of an eastern city, blazing and sparkling in the sun;

the loveliness of the panorama, the noble river like a sheet of purest silver, in which one hundred

vessels may ride with safety; the graceful meandering of the river St Charles before it finds its way

into the St Lawrence; the numerous village spires scattered around; the fertile fields clothed with

innumerable cottages, the abodes of a rich and moral peasantry; the distant Falls of Montmorenci;

the rich park-like scenery of Levis; the lovely Isle of Orleans; and more distant still the frowning

Cape Tourment, and the lofty range of purple mountains of the most picturesque forms, which

bound the prospect, unite to make a *coup d'œil* which without exaggeration is scarcely to be

surpassed in any part of the world.
In the winter-time there is much more leisure

for the merchants than in summer, as the St

Lawrence from the end of December until the end of April is one vast ice-field, isolating Quebec from water-commerce, but giving full employment to numbers of 'ice-men' to saw out great oblong masses of clear bright ice to fill the ice-houses with this much-needed summer luxury. The ice and snow are also turned to account in the fashionable amusements of snow-shoeing, tobogganing, skating, sleigh-driving, &c. Snow-shoeing is capital exercise, but somewhat trying at the commencement; for with a pair of snow-shoes fastened to the feet, the beginner is rather apt to find himself immersed in a snow-drift, and it is a difficult matter to get upon his legs again. This pastime, however, is so well known in theory that we pass to the more favourite one of tobogganing. The toboggan or Indian sleigh—one or two thin planks neatly curled round at one end—is drawn over the snow to the top of a hill. The passengers sit down, carefully 'tucking in' all articles of dress; a slight push is given, and away glides the toboggan at the rate of from twenty to thirty miles an hour. Starting is easy enough; but to descend to the desired spot is not so easy as might appear at first sight, and requires some skill in steering; for if that important matter be unskillfully performed, the toboggan, like a boat, gets 'broadside on' to the hill, twists and turns, shooting out its passengers, who rarely escape some hard knocks. If, however, the steering is successful, the tourists have, in school-boy phrase, a 'jolly ride,' and glide along the level ground at the foot of the slope for a considerable distance. There is, of course, the bother of pulling the toboggan up to the top of the hill; but such effort has the exhilarating dryness of the atmosphere upon one's spirits, and such is the charm of the amusement, that this labour is cheerfully undertaken.

One favourite run was down the citadel glacis, through a gap in a fence and into a closed yard at the base; another, also from the glacis, but running in the direction of the Plains of Abraham. The former being the most dangerous slide, was the favourite one, and many hard blows were given and received. One young gentleman met his fate in the form of a deep cut across his knee, by being tossed out of the toboggan among some scrap-iron and old stove-pipes hidden under the snow. Much sympathy was felt for him, for the wound took a long while to heal, and prevented him tobogganing more that winter. Another gentleman coming down the slide by moonlight with two young ladies in his toboggan, in place of steering through the fence, steered into it, and his face came in contact with a post; unluckily for him, the post was the hardest, and he escaped with a broken jaw, and the ladies with more or less bruises. There was a laughable upset on another occasion. A lady, said to be at least forty (also 'fat and fair'), with a friend of the opposite sex, tempted fortune in a toboggan; but as they approached the gap above mentioned she lost her nerve, and threw herself out as the toboggan was rushing down the steepest part of the slide. In less time than the reader will take to peruse this incident, she was on her head in the snow, and her feet, incased in very black boots, in the air; she then tumbled across the slide; the toboggan with its remaining occupant flew lightly over her, and then this frisky matron and her friend rolled like a pair of frolicsome lamb-

kins to the foot of the slope, the toboggan of course arriving before them.

Skating at Quebec is chiefly carried on at the Rink, a large building about one hundred and seventy feet long and seventy wide, the earth-floor of which is flooded. The ice is carefully swept daily; and each evening the rink-keeper 'dusts' it with just enough water to fill up the cuts made in it by the skaters; so that each morning finds a fresh field of glittering smooth ice. The wooden shed does three duties—namely, keeps out the heat of spring, keeps off the snow, and keeps in the cold of winter; so that skating can often be had at the Rink and nowhere else.

The band of the Rifles often played at the Rink, which was sometimes lighted up at night by gas; and visitors to Quebec had capital opportunities of seeing its young ladies exhibit their skill in the execution of sundry intricate skating-figures. Some years ago, there was a fancy-dress ball on the Quebec rink, and we have extracted a portion of its description from one of the local papers of that date: 'The bugle sounded at nine o'clock, and the motley crowd of skaters rushed on the ice, over which they dashed in high glee, their spirits stirred to the utmost by the enlivening music and the cheering presence of hundreds of ladies and gentlemen. Over the glittering floor sped dozens of flying figures, circling, skimming, wheeling, and intermingling with a new swiftness, the bright and varied colours, the rich and grotesque costumes succeeding each other, or combining with bewildering rapidity and effect. The gentlemen, in addition to the usual characters, introduced some novelties: an owl, a monkey, a monster bottle, a tailor at work, a boy on horseback—all capital representations and by good skaters. Among the ladies were representations of "Night" and "Morning," a vivandière, a habitant's wife, and other characters that appeared to advantage. The skaters presented both a varied and brilliant appearance, their parts being well sustained as to costume and deportment, and their movements on the ice being characterised by that grace and skill of movement bred of long practice. The dances included quadrilles, waltzes, galops, &c.'

That this elegant accomplishment can be turned to use is proved by a legend of two settlers in the Far West who saved their lives by the aid of a pair of skates. One had been captured by Indians, who did not intend to let him live long; but amongst his baggage was a pair of skates. The Indians' curiosity was excited, and the white man was desired to explain their use; he led his captors to the edge of a wide lake, where the smooth ice stretched away as far as the eye could see, and put on the skates. Exciting the laughter of his captors by tumbling about in a clumsy manner, he at length contrived to get a hundred yards from them without arousing their suspicion, when he skated away as fast as he could, and finally escaped.

The other settler is said to have been skating alone one moonlight night; and while contemplating the reflection of the firmament in the clear ice, and the vast dark mass of forest surrounding the lake and stretching away in the background, he suddenly discovered, to his horror, that the adjacent bank was lined with a pack of wolves. He at once 'made tracks' for home, followed by these animals; but the skater kept ahead, and one

by one the pack tailed off; two or three of the foremost, however, kept up the chase; but when they attempted to close with the skater, by adroitly turning aside he allowed them to pass him. And after a few unsuccessful and vicious attempts on the part of the wolves, he succeeded in reaching his log-hut in safety.

The cold during the winter of 1870-71 was often extreme, the thermometer ranging as low as forty degrees below zero. Upon two days the writer had the pleasure of witnessing the beautiful phenomenon called silver-thaw—that is, the trees and shrubs encircled with ice-crystal, the glitter of which on the twigs and branches in the sunlight is wonderfully beautiful. Occasionally the St. Lawrence is entirely frozen over opposite Quebec, and ice boats (on skates) are popular, and the bark glides along at a pace that depends upon the wind and quantity of sail carried. Sleighing was much in fashion; and it is agreeable enough rushing through the extremely cold but dry atmosphere with a pretty young lady nestling against you as you fly along the noiseless track to the music of the sleigh bells, which the law requires each horse to carry on its harness.

Practical jokes are not unknown at Quebec, and several silly ones without wit or purpose were perpetrated that winter; but one of a special and decidedly original character played upon the Control Department, may be worth recording. The Control Department—at the head of which was Deputy-Controller Martindale—was intrusted with the providing of fuel, food, ammunition, bedding, transport, &c. for the British troops, and for some reason or another that branch of the department at Quebec is said to have been somewhat unpopular in the garrison.

On the 23rd and 24th February the following advertisement appeared in the columns of the principal French paper, *l'Événement*:* 'CHATS! CHATS! CHATS! 50 CHATS sont demandés pour donner la chasse aux Rats et Souris qui infestent les Magasins du Gouvernement. Toute personne qui apportera un Chat au Bureau du Député-Contrôleur Martindale, entre 11 heures et midi un jour quelconque jusqu'au 28 du courant, recevra en retour un Dollar (1 \$) par Chat.—Par ordre,

D. C. MARTINDALE, Député-Contrôleur.

QUEBEC, 23 Fév. 1871—3f.

The powers of advertising were in this instance wonderfully exemplified, for at least eight hundred cats were duly brought to the Bureau; but the unfortunate cat-merchants did not receive a dollar. Some, being of a speculative turn, had bought up a number of their neighbours' cats at prices varying between ten cents and twenty-five cents each; and wint with the fire of the cat-merchants at the hoax, the astonishment and indignation of the Control officers, and the catervauling of the pussies brought in boxes, baskets, bags, &c., the scene was one which will long be remembered in Quebec. On Sunday, 26th February (according to a local custom of treating government advertisements), the

* Cats! Cats! Cats! 50 Cats are required to capture the rats and mice that are infesting the Government Magazines. Whoever shall bring a cat to Deputy-Controller Martindale's office between 11 and 12 o'clock on any day up till the 28th inst., shall receive one dollar per cat. By order, &c.

doors of the churches in the country districts round Quebec had the 'cat advertisement' duly posted up, so that on Monday the 27th a bountiful supply of mousers was brought from suburban districts to complete the Control catastrophe.

Of course very strict inquiries were made, with a view of ascertaining the author of the hoax; but that individual has not yet presented himself to public notice, and judiciously made use of the post-office to carry the letter to the *Événement* respecting the insertion of the advertisement. We also understand the editor of the *Événement* was politely requested to render his account for the advertisements to the Control Department. There is, we believe, an old proverb, 'A cat may look at a king'; but many of the inhabitants of the Quebec suburbs did not like to look at cats for some time afterwards.

FRENCH FISHER-FOLK.

They live by themselves and to themselves, these French fisher-folk; an amphibious race, as completely cut off from the shore-staying population as any caste of Hindustan. The quaint village that they inhabit consists of half a score of steep and narrow lanes, and as many airless courts or alleys, clinging to the cliff as limpets anchor to a rock, and topped by the weather-beaten spire of a church, dedicated of course to St. Peter. Hard by there may be a town rich and populous; but its wide streets and display of plate-glass are not envied by the piscatorial clan outside. They have shops of their own, where sails and shawls, ropes and ornaments, high surf-boots and gaudy gown-pieces, jostle one another in picturesque profusion. From the upper windows of the private dwellings project gaffs and booms, whence dangle, for drying purposes, wet suits of dark-blue pilot cloth and dripping pea-coats. Everywhere prevails an ancient and fish-like smell, struggling with the wholesome scent of hot pitch simmering for the manufacture of tarpaulins and waterproofs. Half the houses are draped in nets, some newly tanned to toughen them, others whose long chain of corks is still silvered with herrings-scales. The very children are carving boats out of lumps of dark wreck-wood, or holding a mock auction for tiny crabs and spined sea-urchins. The whole atmosphere of the place has a briny and Neptunian savour about it, and is redolent of the ocean.

A word now as to the fishers themselves; as proud, self-reliant, and independent a race as those hardy Norsemen from whom ethnologists believe them to descend by no fictitious pedigree. Of the purity of their blood there can be little doubt, since the fish-maiden who mates with any but a fisherman is considered to have lost caste; precisely as the gipsy girl who marries a Bunsé is deemed to be a deserter from the tribe. Marrying among themselves then, it is not surprising that there should be an odd sort of family likeness among them, with one marked type of face and form, or rather two, for the men, curiously enough, are utterly unlike the women. Your French fisher is scarcely ever above the middle height, a compact thick-set little merman, with crisply curling hair, gold rings in his ears, and a brown honest face, the unflinching good-humour of which is enhanced

by the gleam of the strong white teeth between the parted lips.

The good looks of the women of this aquatic stock have passed into a proverb; but theirs is no buxom style of peasant comeliness. Half the drawing-rooms of London or Paris might be ransacked before an artist could find as worthy models of aristocratic beauty as that of scores of these young fish-girls, reared in the midst of creels and shrimp-nets and lobster-traps. Their tall slight figures, clear bright complexions, and delicate clean-cut features, not seldom of the Greek mould, contrast with the sun-burnt sturdiness of husband, brother, and betrothed; while the small hands and small feet combine to give to their owners an air of somewhat languid elegance, apparently quite out of keeping with a rough life and the duties of a workaday world.

Work, however—hard and trying work, makes up the staple existence of French fisher-folks, as of French landmen. In the shrimp-catching season, it must indeed be wild weather which scares the girls who ply this branch of industry, with bare bronzed feet and dexterously wielded net, among the breakers. Others, a few years older, may be seen staggering under weighty baskets of oysters, or assisting at the trimming and sorting the many truck-loads of fish freighted for far-away Paris. The married women have their household cares, never shirked, for no children are better tended than these water-babies, that are destined from the cradle to live by net and line; while the widows—under government authority—board the English steam-packets, and enjoy the sole right of trundling off the portmanteaus of English travellers to their hotel.

The men, the real bread-winners of the community, enter well provided into the field of their hereditary labour. The big Boulogne luggers, strongly manned, and superior in tonnage and number to those which any other French port sends forth, are known throughout the Channel, and beyond it. They need to be large and roomy, since they scorn to be cooped within the contracted limits of the narrow seas, but sail away year after year to bleak Norway and savage Iceland; and their skippers, during the herring-fishery, are as familiar with the Scottish coast as with that of their native Picardy. It is requisite too that they should be strong and fit to 'keep' in nautical parlance, the sea; for Boulogne, lying just where the Channel broadens out to meet the Atlantic, is exposed to the full force of the resistless south-west gale, that once drove Philip II.'s boasted Armada northward to wreck and ruin.

These south-west gales, with the abrupt changes of weather due to the neighbourhood of the fickle Atlantic, constitute the romance, or compose the stumbling-block of the fisherman's life. His calling may seem an easy and even an enviable one, to those who on summer mornings watch the fishing fleet glide out of harbour; the red-brown sails gilded by the welcome sunshine and filled by the balmy breeze, the nets festooned, the lines on the reel; keg and bait-can and windlass, harmonising well with the groups of seafaring men and lads leaning about on board; too many, as the novice thinks, for the navigation of the craft. But at any moment, with short warning, the blue sea may become leaden-tinted, and the sky ragged with torn clouds and veiled with flying sand, and the howl-

ing storm may drive the fishers far from home, beat about as best they may for days and nights, and at length to land and sell their fish (here preserved in ice) at Dunkirk, Ostend, Flushing, even some English harbour perhaps a hundred and fifty miles away.

The conscription, that relentless leech who claims its tithe of the blood and manhood of continental nations, in due course takes toll of the fishers. The maritime population, however, supplies the navy, not the army with recruits. It is not until flagship and frigate are manned, that the overplus of unlucky drawers in that state lottery of which the prizes are exemption, get drafted into the ranks. These young sailors find military life a bitter pill to swallow. The writer of these lines has before his eyes a letter from a conscript to his mother in the fishing village, and in which the young defender of his country describes last year's autumn manoeuvres in Touraine, the Little War as he calls it, from a soldier's point of view. There is not a spark of martial ardour or professional pride in this simple document. All the lad knows is that he is marched and countermarched about vast sandy plains from dawn till dark, wet, hungry, and footsore; and how difficult it is at the halting-place to collect an armful of brushwood, by whose cheerful blaze he may warm his stiff fingers and cook his solitary pannikin of soldier's soup.

As might be expected, in a community which more resembles an overgrown family than the mere members of a trade, there exists among these people an unusual amount of charity and rough good-nature. The neighbourly virtues shine brightly amid their darksome limes and stifling courts, and a helping hand is freely held out to those whom some disaster has crippled in the struggle for existence. Bold and self-assertive as their bearing may be, there are no Jacobins, no partisans of the Red faction among these French fishers. They are pious also in their way, seldom failing to attend en masse at the church of St Nicholas or the cathedral of Notre-Dame, before they set out on a distant cruise.

Once and again in early summer, a fisher's picnic will be organised, when in long carts roofed over with green boughs, Piscator and his female relatives, from the grizzled grandmother to the lisping little maiden, who in her lace-cap and scarlet petticoat looks scarcely larger than a doll, go merrily jolting off to dine beneath the oaks of the forest. In their quiet way, they are fond of pleasure, holding in summer dancing assemblies, where all the merry-making is at an end by half-past nine, and which are as decorous, if less ceremonious, as any ball can be. They are patrons of the theatre too, giving a preference to sentimental dramas, and shedding simple tears over the fictitious sorrows of a stage heroine; while in ecclesiastical processions the brightest patches of colour, artistically arranged, are those which are produced by the red kirtles, the blue or yellow shawls, and the snowy caps of the sailor-maidens.

The gay holiday attire, frequently copied, on the occasion of a fancy dress-ball, by Parisian ladies of the loftiest rank, with all its ornaments of rich colour and spotless lace; the ear-rings and cross of yellow gold, the silver rings, trim slippers, and coquettish headgear of these French mermaids; no doubt lends a piquancy to their beauty which might otherwise be lacking. Sometimes an excep-

by a lovely fisher-girl may be tempted by a foreman proposal of marriage, and leaves her clan they become a viscountess, or it may be a marriageless, for mercenary marriages are not universal afterfrance. But such incongruous unions seldom the very happily; for the mermaidian is, alas! his reply uneducated, and proves at best too rough diamond to appear to advantage in a golden setting.

EMERGENCIES.

ACCIDENTS of various kinds are continually occurring in which the spectator is suddenly called upon to do his best to save life or relieve suffering without the aid of skilled advice or scientific appliances. A body has been drawn from the water in an insensible condition, and thus far a rescue has been effected; but the scene may be more or less distant, not only from the residence of the nearest doctor, but from any house; and unless the bystander is able to apply prompt means to restore respiration and warmth, a life may yet be lost. Again, a lady's dress is in flames, or it may be fire has broken out in a bedroom—accidents which, if immediate steps be not taken, may end fatally to life and property, long before the arrival of the physician or fire-brigade. One's own life too may be placed in such instant jeopardy that it can only be preserved by active and intelligent exertions on our own part. Situations of this kind attend the sailor, soldier, and traveller as 'permanent risks'; while in the city or field, and even in the security of home, dangers of different kinds confront us which are best described by the word emergencies.

The pressing question in any emergency is of course, 'What is to be done?' Unhappily, the answer is not always at hand. We are often altogether unprepared to act, or we act in such a way as only to increase the danger. The most humane onlooker in a case of partial drowning may at the same time be the most helpless. While in any of the frequent casualties to children—such as choking, scalding, &c.—the tenderest mother may but contribute to the calamity, either by the use of wrong means or the inability to apply right ones. How common this is in respect of many kinds of accidents, and how many of those cases returned 'fatal' might have had a happier issue had the spectator but known 'what to do.'

The terse advice supposed to meet every species of emergency is to 'keep cool.' We admit its force, and agree that it cannot be too frequently insisted upon. Without presence of mind, neither the zeal of self-interest nor the solicitude of affection itself can act with effect. In some instances even, special skill and knowledge may be paralysed by an access of nervousness and its consequent confusion of mind. Again there occur many grave situations in which tact and self-possession are all that are necessary to avert serious calamity. The following anecdote illustrative of this went the round of the newspapers shortly after the disastrous fire in Brooklyn Theatre. Some stage-properties suddenly took fire during a performance before a

crowded audience at a certain European theatre. The usual panic ensued. A well-known actor, aware that the danger was not serious, and dreading the result of a sudden rush from the house, coolly stepped in front of the curtain, and in calm tones announced that his Majesty the Emperor, who then occupied the imperial box, had been robbed of some valuable jewels, and that any one attempting to leave the theatre would be immediately arrested. The threat would of itself have been useless, but the fact and manner of its delivery conveyed an assurance of safety to the excited people which no direct appeal to their reason could have done. They resumed their places; the fire was subdued; and not till next day did they learn the *real* peril they had escaped by the timely ruse of the great actor. How terrible a contrast that unhappy and unchecked panic which led to the loss of life at Brooklyn!

The effects of panic and confusion have sometimes their amusing side. We have seen ordinarily sane people casting crockery and other brittle ware into the street from a height of several stories—to *save it from fire*; and there occurs a passage in one of Hood's witty ballads which seems to prove the incident by no means a rare one:

Only see how she throws out her *chancey*,
Her basins and tea-pots and all;
The most brittle of *her* goods—or any;
But they all break in breaking their fall.

But while a jest may be pardonable in such a case, this losing one's head too often takes place in circumstances involving loss of life or property. An excited pitying crowd, for example, is gathered round a person struck in the street with apoplexy. An alarm has been given, and a curious gaping group has come to witness a case of suicide by hanging. A concourse of people stand before a house from which issue the first symptoms of a fire. In such cases the spectators are usually nerveless and purposeless: the danger to life or property is in the exact ratio of the number of onlookers. How curious and instructive to note the change which comes over the scene on the arrival of a single sensible and self-possessed person. One of the idle sympathisers of the apoplectic patient suddenly frees the neck and chest; a second goes sanely in search of temporary appliances; a third runs zealously for a doctor, and the remainder go about their business. One stroke of a knife and the would-be suicide has been placed in the hands of a few of the more intelligent by-standers for resuscitation. The precise locality of the fire has been reached, and the fire either extinguished promptly with the means at hand, or kept under until the arrival of the fire-engines which have been at once sent for.

Now, what is the real source of this exceptional self-possession—so all-important in an emergency? Is it not, after all, the quiet confidence begot of knowing what is best and proper to be done under given circumstances? It is quite true, no doubt, that presence of mind is a moral quality more or less independent of technical knowledge, but in a plain practical way it is directly *its* result. To become familiar with difficulties is to divest them of their character as such, and to enable us to act with all the coolness and precision exercised in

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Work, however—hard and trying work, makes up the staple existence of French fisher-folks, as of French landmen. In the shrimp-catching season, it must indeed be wild weather which scares the girls who ply this branch of industry, with bare bronzed feet and dexterously wielded net, among the breakers. Others, a few years older, may be seen staggering under weighty baskets of oysters, or assisting at the trimming and sorting the many truck-loads of fish freighted for far-away Paris. The married women have their household cares, never shirked, for no children are better tended than these water-babies, that are destined from the cradle to live by net and line; while the widows—under government authority—board the English steam-packets, and enjoy the sole right of trundling off the portmanteaus of English travellers to their hotel.

The men, the real bread-winners of the community, enter well provided into the field of their hereditary labour. The big Boulogne luggers, strongly manned, and superior in tonnage and number to those which any other French port sends forth, are known throughout the Channel, and beyond it. They need to be large and roomy, since they seem to be cooped within the contracted limits of the narrow seas, but sail away year after year to bleak Norway and savage Iceland; and their skippers, during the herring-fishery, are as familiar with the Scottish coast as with that of their native Picardy. It is requisite too that they should be strong and fit to 'keep,' in nautical parlance, the sea; for Boulogne, lying just where the Channel broadens out to meet the Atlantic, is exposed to the full force of the resistless south-west gale, that once drove Philip II.'s boasted Armada northward to wreck and ruin.

These south-west gales, with the abrupt changes of weather due to the neighbourhood of the fickle Atlantic, constitute the romance, or compose the stambling-block of the fisherman's life. His calling may seem an easy and even an enviable one, to those who on summer mornings watch the fishing fleet glide out of harbour; the red-brown sails guided by the welcome sunshine and filled by the balmy breeze, the nets festooned, the lines on the reel; keg and bait-can and windlass, harmonising well with the groups of seafaring men and lads lounging about on board too many, as the novice thinks, for the navigation of the craft. But at any moment, with short warning, the blue sea may become leaden-hued, and the sky ragged with torn clouds and veiled with flying scud, and the howl-

ing storm may drive the fishers far from the coast about as best they may for days and of at length to land and sell their fish (here preserved in ice) at Dunkirk, Ostend, Flushing, even some English harbour perhaps a hundred and fifty miles away.

The conscription, that relentless leech which claims its tithe of the blood and manhood of continental nations, in due course takes toll of the fishers. The maritime population, however, supplies the navy, not the army with recruits. It is not until flagship and frigate are manned, that the overplus of unlucky drawers in that state lottery of which the prizes are exemption, get drafted into the ranks. These young sailors find military life a bitter pill to swallow. The writer of these lines has before his eyes a letter from a conscript to his mother in the fishing village, and in which the young defender of his country describes last year's autumn manoeuvres in Tournai, the Little War as he calls it, from a soldier's point of view. There is not a spark of martial ardour or professional pride in this simple document. All the lad knows is that he is marched and countermarched about vast sandy plains from dawn till dark, wet, hungry, and footsore; and how difficult it is at the halting-place to collect an armful of brushwood, by whose cheerful blaze he may warm his stiff fingers and cook his solitary pannikin of soldier's soup.

As might be expected, in a community which more resembles an overgrown family than the mere members of a trade, there exists among these people an unusual amount of charity and rough good-nature. The neighbourly virtues shine brightly amid their darksome lanes and stifling courts, and a helping hand is freely held out to those whom some disaster has crippled in the struggle for existence. Bold and self-assertive as their bearing may be, there are no Jacobins, no partisans of the Red faction among these French fishers. They are pious also in their way, seldom failing to attend *en masse* at the church of St Nicholas or the cathedral of Notre-Dame, before they set out on a distant cruise.

Once and again in early summer, a fisher's picnic will be organised, when in long carts roofed over with green boughs, Piscator and his female relatives, from the grizzled grandmother to the lisping little maiden, who in her lace-cap and scarlet petticoat looks scarcely larger than a doll, go merrily jolting off to dine beneath the oaks of the forest. In their quiet way, they are fond of pleasure, holding in summer dancing assemblies, where all the merry-making is at an end by half-past nine, and which are as decorous, if less ceremonious, as any ball can be. They are patrons of the theatre too, giving a preference to sentimental dramas, and shedding simple tears over the fictitious sorrows of a stage heroine; while in ecclesiastical processions the brightest patches of colour, artistically arranged, are those which are produced by the red kirtles, the blue or yellow shawls, and the snowy caps of the sailor-maidens.

The gay holiday attire, frequently copied, on the occasion of a fancy dress-ball, by Parisian ladies of the loftiest rank, with all its adjuncts of rich colour and spotless lace; the ear-rings and cross of yellow gold, the silver rings, trim slippers, and coquettish headgear of these French mermaids; no doubt lends a piquancy to their beauty which might otherwise be lacking. Sometimes an excep-

tionally lovely fisher-girl may be tempted by a brilliant proposal of marriage, and leaves her clan to become a viscountess, or it may be a marchioness, for mercenary marriages are not universal in France. But such incongruous unions seldom end very happily; for the mermaid is, alas! entirely uneducated, and proves at best too rough a diamond to appear to advantage in a golden setting.

EMERGENCIES.

ACCIDENTS of various kinds are continually occurring in which the spectator is suddenly called upon to do his best to save life or relieve suffering without the aid of skilled advice or scientific appliances. A body has been drawn from the water in an insensible condition, and thus far a rescue has been effected; but the scene may be more or less distant, not only from the residence of the nearest doctor, but from any house; and unless the bystander is able to apply prompt means to restore respiration and warmth, a life may yet be lost. Again, a lady's dress is in flames, or it may be fire has broken out in a bedroom—accidents which, if immediate steps be not taken, may end fatally to life and property, long before the arrival of the physician or fire-brigade. One's own life too may be placed in such instant jeopardy that it can only be preserved by active and intelligent exertions on our own part. Situations of this kind attend the sailor, soldier, and traveller as 'permanent risks'; while in the city or field, and even in the security of home, dangers of different kinds confront us which are best described by the word emergencies.

The pressing question in any emergency is of course, 'What is to be done?' Unhappily, the answer is not always at hand. We are often altogether unprepared to act, or we act in such a way as only to increase the danger. The most humane onlooker in a case of partial drowning may at the same time be the most helpless. While in any of the frequent casualties to children—such as choking, scalding, &c.—the tenderest mother may but contribute to the calamity, either by the use of wrong means or the inability to apply right ones. How common this is in respect of many kinds of accidents, and how many of those cases returned 'fatal' might have had a happier issue had the spectator but known 'what to do.'

The terse advice supposed to meet every species of emergency is to 'keep cool.' We admit its force, and agree that it cannot be too frequently insisted upon. Without presence of mind, neither the zeal of self-interest nor the solicitude of affection itself can act with effect. In some instances even, special skill and knowledge may be paralysed by an access of nervousness and its consequent confusion of mind. Again there occur many grave situations in which tact and self-possession are all that are necessary to avert serious calamity. The following anecdote illustrative of this went the round of the newspapers shortly after the disastrous fire in Brooklyn Theatre. Some stage-properties suddenly took fire during a performance before a

crowded audience at a certain European theatre. The usual panic ensued. A well-known actor, aware that the danger was not serious, and dreading the result of a sudden rush from the house, coolly stepped in front of the curtain, and in calm tones announced that his Majesty the Emperor, who then occupied the imperial box, had been robbed of some valuable jewels, and that any one attempting to leave the theatre would be immediately arrested. The threat would of itself have been useless, but the fact and manner of its delivery conveyed an assurance of safety to the excited people which no direct appeal to their reason could have done. They resumed their places; the fire was subdued; and not till next day did they learn the *real* peril they had escaped by the timely ruse of the great actor. How terrible a contrast that unhappy and unchecked panic which led to the loss of life at Brooklyn!

The effects of panic and confusion have sometimes their amusing side. We have seen ordinarily sane people casting crockery and other brittle ware into the street from a height of several stories—to save it from fire; and there occurs a passage in one of Hood's witty ballads which seems to prove the incident by no means a rare one:

Only see how she throws out her *chancey*,
Her basins and tea-pots and all;
The most brittle of *her* goods—or any;
But they all break in breaking their fall.

But while a jest may be pardonable in such a case, this losing one's head too often takes place in circumstances involving loss of life or property. An excited pitying crowd, for example, is gathered round a person struck in the street with apoplexy. An alarm has been given, and a curious gaping group has come to witness a case of suicide by hanging. A concourse of people stand before a house from which issue the first symptoms of a fire. In such cases the spectators are usually nerveless and purposeless: the danger to life or property is in the exact ratio of the number of onlookers. How curious and instructive to note the change which comes over the scene on the arrival of a single sensible and self-possessioned person. One of the idle sympathisers of the apoplectic patient suddenly frees the neck and chest; a second goes sanely in search of temporary appliances; a third runs zealously for a doctor, and the remainder go about their business. One stroke of a knife and the would-be suicide has been placed in the hands of a few of the more intelligent by-standers for resuscitation. The precise locality of the fire has been reached, and the fire either extinguished promptly with the means at hand, or kept under until the arrival of the fire-engines which have been at once sent for.

Now, what is the real source of this exceptional self-possession—so all-important in an emergency? Is it not, after all, the quiet confidence begot of knowing what is best and proper to be done under given circumstances? It is quite true, no doubt, that presence of mind is a moral quality more or less independent of technical knowledge, but in a plain practical way it is directly *its* result. To become familiar with difficulties is to divest them of their character as such, and to enable us to act with all the coolness and precision exercised in

ordinary events. To a surgeon, an accident is a 'case,' not an 'emergency;' while even an abstract knowledge of 'what to do' arms the mind of the non-professional against excitement or confusion. The possession of one little fact, the recollection of some read or heard of device or remedy, is often, sufficient to steady the mind and enable it to act effectively. How frequently some half-forgotten item of surgical knowledge, some stray prescription, or some plan casually recommended ever so long ago, is the means, here and there, of eluding the fatal possibilities of an emergency.

There is really little excuse for ignorance of the means and methods required to meet ordinary cases, seeing that information in abundance is to be had at trifling cost and with little trouble. There are surgical and medical works, published at almost nominal prices, the expressed aim of which is to instruct the public what steps to take in most kinds of accidents, in the absence of professional assistance. There are works also which, treating mainly of household matters, contain valuable hints to parents and others on the subject of accidents to children, as also of fires to person and property; while here and there in our serial literature may be found useful advice on such special kinds of emergencies as the bolting of horses, capsizing of boats, bites by poisonous snakes, &c. But above all, to those who care to remember what they read, the columns of the daily newspapers afford much sound instruction in every species of untoward event. In spite, however, of the ease with which people might inform themselves, and in spite of frequently bitter experience, there is a very general apathy regarding such matters. In upper and middle class families, a certain amount of interest is no doubt evinced, and books of reference are found in their libraries; but the practical importance of knowing their contents, and so forearming against contingencies, is by no means widely recognised. It is scarcely surprising then to find the masses so indifferent, and as a consequence so helpless to assist themselves or each other in any unusual situation.

The idea of giving the subject some place in the common school course is one, we think, worthy of consideration. Physical education receives a fair share of encouragement in the higher class of schools; and some of the exercises enjoined, such as running, climbing, swimming, and rowing, are direct provisions against accidents by field or water; while all of them, by giving a degree of confidence to the mind, are of the greatest value as a training to meet emergencies generally. Physiology too is gradually making good its claim to the attention of teachers; and the instruction in Domestic Economy prescribed for girls comprises hints how to act in what may be called household emergencies. All this is very satisfactory; and were some pains taken in addition to point out to pupils of both sexes the commoner dangers by which life is beset, and were they told in a plain practical way how these are best averted, we believe the case would be very fairly met. To the skilled teacher, a short series of lessons of this kind would not necessarily be any great tax upon his time, but would rather form one of the most interesting of those 'asides' to which he properly resorts as an occasional relief to the tediousness of school-routine.

To children of a larger growth, we can only

repeat that the means of informing themselves are not beyond reach. There are, of course, now and then such combinations of circumstances as no knowledge or training can provide for, just as there are many accidents which no human foresight can prevent. Leaving these out of the question, however, few of us pass through life without having at one time or other to exercise our intelligence and knowledge to preserve either our own life or property, or the life or property of others in circumstances where these may be exercised successfully. Our interest and duty alike enjoin us to take reasonable pains to forearm ourselves, and the neglect to do so is clearly culpable. But we may have occasion by and by to present our readers with a few practical hints on the subject of 'What to do in Emergencies.'

THIS TRADE IN ARTIFICIAL EYES.

On this subject, the *New York Sun* gives some amusing particulars: 'Between eight and ten thousand eyes are sold annually in the United States. An eye-maker gives one in one hundred and twenty-five as the proportion of one-eyed people. Computing the population of the country at forty-two millions, this rate gives three hundred and thirty-six thousand as the number of persons with only one eye in the Republic. Consequently, while ten thousand people supply their optical deficiency with an artificial eye, two hundred and twenty-six thousand go without. In proportion to the population, the eye-maker said, there are more one-eyed people in Paterson, New Jersey, than any other town in this or any other country. All towns that have many foundries and factories, and whose air is impregnated with soot and smoke, count their one-eyed inhabitants by the score; but Paterson is ahead of the rest. The eye-maker knew of the three proprietors of a single foundry there each losing an eye. Pittsburg comes next. In this city one-eyed folks abound in the neighbourhood of manufacturing establishments. Once he had four patients from near a foundry in West Eleventh Street alone. Not only the foul atmosphere destroys the sight, but flying pieces of metal burn out the eyes of the workmen. An importer who sells one thousand five hundred eyes annually sends one-third to Canada; Chicago takes three hundred; and Cincinnati more than St. Louis. New Orleans, Nashville, and other towns west and south buy the remainder. The colour for eyes most in demand is what is known as "Irish blue," a peculiarly light azure that predominates in Ireland. The average cost of an eye is ten dollars. He sells comparatively few eyes in this city, as New Yorkers prefer to have their eyes made to order.'

A NOBLE OCCUPATION.

A newspaper records as follows: 'The Duke of Hamilton left Hamilton Palace for the south yesterday. During his stay of six days he shot 373½ brace of grouse, 4 brace of black-game, 4 hares, and 2 snipes.' This makes a slaughter of seven hundred and sixty-one animals in six days, or at an average upwards of a hundred and twenty-six per diem. Hard work!

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THE ROYAL GAME OF GOLF.

For ages golf has been pre-eminently the national game of Scotland. As its history emerges from the mists of antiquity we find football and it linked together as representative games, in fulminations against 'unprofitabill sportis,' unduly distracting the attention of the people from more serious affairs. But our game far exceeds this old rival in interest; and if it were not for the popularity of curling in its season, no rival pastime could pretend to vie with golf in Scotland.

The mode of playing golf is so well known in these days that it may suffice to explain that it is a game played over extensive commons, or 'links' as they are termed; that the implements used are peculiarly constructed clubs, so weighted at the crook or 'head' of the shaft, as to give great impetus to the small hard gutta-percha ball to be driven along the grass; and that the object of the players—either as single antagonists or two against two—is to endeavour to vie with each other as to who shall drive the ball towards and into a series of small artificially made holes, in the fewest strokes. From hole to hole the party proceeds, sometimes one winning a hole, sometimes another, and occasionally (by evenly contested play) halving: until the whole round of the green has been traversed; when the party who has gained the greatest number of holes is declared the winner. The links ought to be of considerable extent, and the holes several hundred yards apart, so as to give opportunity for skilful driving and other niceties of the game. To those unfortunates who have only read of the pastime, it may appear hard to believe in the reality of the enthusiasm shown by its votaries; but whenever they are privileged to come under its influence, even as spectators, they will find it is one of the most fascinating of pursuits. How can a man describe in fitting language the subtle spell that brings him out in all weathers and seasons, and makes him find perfect pleasure in 'grinding round a barren stretch of ground, impelling a gutta-percha ball before him, striving to land it in a succession

of small holes in fewer strokes than his companion and opponent,' as the game might be described by one of that class of men to whom the 'primrose by the river's brink a primrose is, and nothing more.'

The fascinations of the game have enlisted in the ranks of its votaries men of all classes, many of them famous on other fields, who have made their reminiscences of their beloved pursuit mediums for many a bright word-picture in prose and verse. Hitherto no attempt has been made to gather together what has been so said and sung in praise of the pastime; but in Mr Robert Clark's beautiful volume now before us, entitled *Golf—a Royal and Ancient Game*, ample amends have been made for this neglect, by one of the most enthusiastic and best golfers of the day. Here we have presented in a gossipy way so beloved by golfers, wealth of material, both as regards the history and literature of the fascinating game—a labour of love in an artistic guise. What the author is on the links, so seems he to be among his printers and artists and binders—*facile princeps*. The volume before us, though unfortunately too costly to be very generally available, is a marvel of beautiful typography and tasteful binding. Our author has gone for his information to the most various sources—old acts of the Scots parliament, proclamations by kings, burgh records, minutes of the more prominent golf-clubs, books and magazines; and by judicious editing of this medley has shewn the many-sidedness of the game in a way that none but a devotee could.

Mr Clark wastes no space on unprofitable speculations as to the origin of golf. All that is clear in this vexed subject is that though Scotland is the chosen home of the game, she is not its birth-place. It is, however, of little moment whether the game came in with the Scandinavians who settled on the east coast of Scotland, or whether it was brought northward over the Border as a variety of the English 'bandy-ball,' or even if we have to go back to the Campus Martius, and look for the parent of golf in the curved club and feather ball of the Roman *Paganica*. Games of ball seem

to have existed in all ages, and it is therefore probable that golf is a development of some older game, or perhaps a 'selection of the fittest' from several previously existing ball-games. It is sufficient for our purpose that early in the fifteenth century it was at least as popular with all classes as it is to-day.

When gunpowder made archery a thing of the past, the conflict between love of country and love of golf ceased, and the game went on prospering under the smiles of royal favour, surviving proclamations of various town-councils directed against sacrilegious golfers whose sin was held to be, not so much that they played on Sunday, as on that part of the day called 'the time of the sermons.' This matter was set at rest by the decree of James VI. of Scotland, who in 1618 sent from his new kingdom of England an order that after divine service 'our good people be not discouraged from any harmless recreation,' but prohibiting 'the said recreations to any that are not present in the church, at the service of God, before their going to the said recreations;' or as Charles I., when subsequently ratifying this order, puts it, 'having first done their dutie to God.'

Besides James VI.'s crowning act of founding the Royal Blackheath Club, Mr Clark has recalled two other instances of royal connection with the game in a charming way, as one of the illustrations in his book is from Sir John Gilbert's picture of Charles I. receiving, during a game on Leith Links, the intelligence of Sir Phelim O'Neill's rebellion in Ireland in 1642; while another is a delicately drawn pen-and-ink sketch by Mr James Drummond, R.S.A., of the house in the Canongate of Edinburgh, which John Paterson, shoemaker, built for himself with half the stake in that famous 'foursome'—the Duke of York (James VII.) and Paterson against two English noblemen.

With the Stuarts went out for a time royal countenance of the game, till William IV. became patron of the Royal and Ancient Club of St Andrews, and presented to it for annual competition that coveted golfing trophy, the gold medal.

But though there came kings who knew not golf, the game lost none of its old popularity. Still, as before, pre-eminently the game of the people, we find it associated with many a notable scene and character in the history of Scotland. So fond of the game was the great Montrose, that hardly had the minstrels ceased to serenade him and his day-old bride 'Sweet Mistress Magdalene Carnegie,' when we find him hard at work with clubs and ball. That fifty years later it continued to be the favourite amusement of the aristocracy of the Scottish capital, we can gather from the curious books of expenditure of Sir John Foulis of Ravelston, who seems to have spent most of his leisure time 'losing at golf' on Musselburgh and Leith Links with Hamilton and Rothes and others of the highest quality of the time. We read of Balmerino's brother, Alexander Elphinston, and Captain Porteous, the victim of the famous 'mob,' playing in 1724 'a solemn match at golf' for twenty guineas on Leith Links, where, a few years later, might constantly be seen Lord President Forbes of Culloden, who was such a keen golfer, that when Leith Links were covered with snow he played on the sands; though even he has to yield in all absorbing devotion to the game to Alexander McKellan, 'the Cock o' the Green,' immortalised in *Key's Poems*, who played every day and all day

long, and then practised 'putting' at the 'short holes' by candle-light.

It is almost superfluous to say that in our own day the noble and ancient pastime is still the game of the Scots, and latterly of the English, of all classes and in all parts of the world. One little fact that incontestably proves the eminent respectability of the game is that 'the minister' can be a golfer without the least fear of the strait-laced of presbyteries. It is said that when the canny Scot abroad 'prospects' for a new settlement, while he naturally rivets one eye on the main chance, with the other he reckons up the capabilities of the ground for his favourite game; therefore it is that golf has taken firm root and flourishes in many a distant colony. Across the Border the game is so acclimatised that formidable rivals to our native players are now trained on well-known English greens. That it may go on and prosper is of course the wish of every true lover of the invigorating pastime.

Mr Clark gives us some historical notes of the more prominent of the many golfing clubs that now flourish in different parts of Scotland, and extracts from their minute-books the leading events of their career. Now and then we come across eccentricities, such as the feats of Mr Sceales and Mr Smellie of the Edinburgh Burgess Club in driving balls over the dome of St Giles's Cathedral, one hundred and sixty-one feet high; or the even more wonderful achievement of another member of this club, who drove a ball in forty-four strokes from *inside* their golf-house on Bruntsfield Links over the hill of Arthur Seat. As a rule, however, these clubs pursue the even tenor of their way, the members finding their best happiness in playing the pure and simple game.

While the Honourable Company of Edinburgh Golfers is generally held to be the oldest Scotch Club, so great has been the development of its sister Club at St Andrews, and so great are the attractions of golfing on the famous links of the venerable city, that the 'Royal and Ancient' takes precedence over all, and is indisputably the club of the kingdom. What Newmarket is to racing, or Melton to hunting, St Andrews is to golf. In St Andrews, it is not a mere pastime, but a business and a passion. It is the one recreation of the inhabitants from the Principal of the College to the youngest urchin; it has even invaded the domain of croquet, and has taken captive the ladies, who now take so keen an interest in the game, that on more links than those of St Andrews their green is a charming feature of the place. In short, in St Andrews 'no living thing that does not play golf, or talk golf, or think golf, or at least thoroughly knock under to golf, can live.'

The chief prize of the 'Royal and Ancient'—the gold challenge medal played for every autumn, presented in 1837 by King William IV.—is termed the 'Blue Ribbon of Golf.' To win it is the dream of every member of the Club. Other clubs, such as North Berwick, Musselburgh, Montrose, Perth, Prestwick, Burgess, &c. have each its own time-honoured challenge trophy, that of the Royal Musselburgh being laden with more than a century of medals commemorating each winner. That English clubs too are following fast the fashion set by their older brethren north of the Tweed, is attested by the prizes now competed for at Westward Ho!

in Devonshire, Heylake in Cheshire, and at Wimbledon, &c.; though it is but fair to state that Blackheath claims with good reason to be father of all English golf-clubs, and has for long been celebrated for the keenness of its players and the prizes offered for competition.

So much for the history of the game; let us now glance at its literature. In the interesting collection of prose papers Mr Clark has gathered from various quarters, we can study the peculiar features of the game and the effect it has, for the time, on the tempers of its votaries. As we have seen at St Andrews, the ardent golfer has little time for thought or conversation unconnected with the game. For the time being the be-all and end-all of his life lies within the pot-hook-shaped course he has to traverse; and not a little of his happiness or his misery for the day depends on the nature of the match he succeeds in getting. Though the game is as a rule an exceedingly social one, and admits of quiet chat and occasional good-natured banter, the *true* golfer at work is essentially a man of silence; chattering during the crises of the game is as abhorrent to him as conversation during whist; one thing only is as obnoxious as the human voice to him then—that is, any movement of the human body near him. ‘Stand still while I’m putting,’ and ‘Don’t speak on the stroke,’ are two postulates he would fain enforce. This over-sensitiveness to external influence may explain the seeming ungallantry of the ‘Colonel’ in H. J. M.’s amusing account of *The Golfer at Home*, which appeared in the *Cornhill Magazine* a few years ago. After a charming little picture of the ‘Colonel’ resenting, though he does not openly object to Browne being accompanied over the course by ‘his women,’ as he ungallantly terms Mrs Browne and her sister, he says to his partner: ‘The Links is not the place for women; they talk incessantly, they never stand still, and if they do, the wind won’t allow their dresses to stand still.’ However, as they settle down to their game, the ‘Colonel’s’ good temper returns under the healthy influence of an invigorating ‘round,’ and gives H. J. M. an opportunity of pointing out how all ill-humours of body and mind give way before the equable and bracing exercise of a round or two of the Links of St Rule. That the reader may see the amount of walking exercise taken in a round of St Andrews Links, it may be interesting to note that the exact distance, as the crow flies, is three miles eleven hundred and fifty-four yards; so that the golfer who takes his daily three rounds walks at *least* eleven miles. It is no wonder, then, that in addition to its own attractions, golf is esteemed as a capital preparation for the moors or the stables, hardening as it does the muscles both of arms and legs. What hunting does for the cavalry soldier as a training for more important bursts in the battle-field, the like does golf for the infantry soldier in bracing him to encounter forced marching with ease. The Links have formed the training-ground of many a brilliant officer.

Space will not allow us to dwell on the general gossip about St Andrews and St Andrews players—amateur and professional—that we find in Mr Clark’s book, further than to mention three names. First, that of the great champion of the professionals, Allan Robertson, who was ‘never beaten in a match,’ of the brilliant but short-lived

career of poor ‘young Tom Morris,’ the champion player of his day—son of a worthy sire who still survives; of Mr Sutherland, an old gentleman who made golf the chief business of his life, whose interest in his fellow-men, not as men but as golfers, is well shewn in this anecdote. His antagonist was about to strike off for the finishing hole at St Andrews, when a boy appeared on the bridge over the burn. Old Sutherland shouted out: ‘Stop, stop! Don’t play upon him; he’s a fine young golfer!’

It is in verse, however, that the votary of golf finds the field congenial to his subject.

In 1842 appeared a clever collection of poems, entitled *Golfiana*, by George Fullerton Carnegie of Pittarrow, which delighted the golfers of that day by the humorous way in which it hit off the playing characteristics of the men he introduced into it. He begins by throwing down the gauntlet to those students of Scottish history who sigh over the musty memories and deplore the decayed glories of the city of their patron saint:

St Andrews! they say that thy glories are gone,
That thy streets are deserted, thy castles o’er-
thrown:

If thy glories be gone, they are only, methinks,
As if were by enchantment transferred to thy Links.
Though thy streets be not now, as of yore, full of
prelates,
Of abbots and monks, and of hot-headed zealots,
Let none judge us rashly, or blame us as scoffers,
When we say that instead there are Links full of
golfers.

With more of good heart and good feeling among
them

Than the abbots, the monks, and the zealots who
sung them!

We have many capital songs in honour of the game; amongst others a parody of Lord Houghton’s well-known song, *Strangers yet*, from which it will be seen that something more is necessary to make a good golfer than a set of clubs and an anxious ‘caddy’ to carry them:

DUFFERS YET.—BY TWO ‘LONG SPOONS.’

After years of play together,
After fair and stormy weather,
After rounds of every green
From Westward Ho! to Aberdeen;
Why did e’er we buy a set

If we must be duffers yet!

Duffers yet! Duffers yet!
After singles, foursomes—all,
Fractured club and cloven ball;
After grief in sand and whin,
Fozzled drives and ‘puts’ not in—
Ev’n our caddies scarce regret
When we part as duffers yet,

Duffers yet! Duffers yet!

After days of frugal fare,
Still we spend our force in air;
After nips to give us nerve,
Not the less our drivers swerve;
Friends may back and foes may bet,
And ourselves be duffers yet,

Duffers yet! Duffers yet!

Must it ever then be thus?
Failure most mysterious!
Shall we never fairly stand
Eye on ball as club in hand?
Are the bounds eternal set
To retain us duffers yet?

Duffers yet! Duffers yet!

In conclusion, we may remark that though golf, to the uninitiated, may appear to be a game requiring considerable strength of muscle for its achievement, it is not so; for the easier it is played, the better are the results. To apply much force to the stroke is to imperil the chance of driving a far ball; whereas by a moderate swing of the club, the ball is not only driven far and sure, but goes from no effort apparent to the striker.

A notion also prevails that golf is a game suited for young and middle-aged folks only. This is a delusion, for no outdoor pastime is more fitted for elderly people. To attain *great* excellence in the game, the player must commence early in life; but to become enamoured of its joys requires but a beginning, and that beginning may be made by men who have long passed the meridian of life. We could point to many elderly gentlemen whose lives are being lengthened by the vigorous game, and who, when their daily round or rounds are finished, can fight their battles o'er again in the cheery club-house, with all the zest of youth. When games such as cricket have been found too much, or perhaps the exertion of tramping the moors too severe, the sexagenarian may safely take to the easy but invigorating pursuit of golf, and 'bless the chiel who invented it.' If he misgives his ability to cope with the exertion, or fancied exertion, of pacing a few miles of green turf and wielding a club, our advice to him is to place himself in the hands of a professional golf-player—plenty of whom are to be found wherever there are links—and try; and in a wonderfully short time our veteran may find himself interested, perhaps absorbed, in a game the delights of which he has lived all these years without having been able till now to realise!

FROM DAWN TO SUNSET.

PART III.

CHAPTER THE SECOND.

DEBORAH waited and watched—a gloom unutterable weighed on her spirits—and no Mistress Fleming came. At last old Jordan Dinnage arrived at the castle alone, looking scared and sorrow-stricken.

'The master is very ill,' said Mistress Marjory, as she waited on Jordan. 'These be bad days, Master Dinnage. I doubt if he lives till morning. Doctor says he won't; but doctors know naught. In general, if doctors say "He'll be dead by mornin'," it means he'll live to a good old age; I've seed it often. But mark my words, Jordan Dinnage: there's not much life in our dear Master; he's goin'. This comes o' leavin' Enderby. I felt it; I knew'd 't would be so. *This comes o' Master Sinclair's leavin'.* O Jordan Dinnage, it's wrong, it's grievous wrong, this leavin' Enderby, for this grand blowed-out old place, an' these flaunting livery-men an' maids. Master Sinclair's curse is on us!'

'Nay, nay, Mistress Marjory; these be women's superstitions. Mistress Deborah did rightly. A goose she would ha' been to fling all this grandery and gold guineas in the ditch, for fear o' bad luck, sec'd! It's no more than that, than thou'rt a wise woman. The Master'll pull through; an' if he don't, better die a prince than a beggar.'

Marjory shook her head. 'Give me honest beggary. An' where's Mistress Dinnage? Be sure Lady Deb 'ud be glad o' her company now. Why didst not bring her along, Jordan? It speaks not much for her love.'

Jordan reddened. 'Not a word agen Meg, Mistress Marjory! She'll be comin' soon. I must see Mistress Deborah.'

'Well, come now. An' heaven send Master Kingston soon.'

Deborah met the dear old man with outstretched hands. 'Jordan, I am so glad to see ye! Where is Margaret?'

Jordan shuffled from one foot to the other, and twisted his hat round in his hands. 'Well, Lady Deb—Mistress Deborah—I've not brought Meg along.'

'I see ye have not!' cried Deborah impetuously. 'But where is she?'

The old gray eyes, growing dim with age, looked straight and honestly on their young Mistress, yet humbly too, as he answered in a low voice: 'Where she ought to be, Mistress Deborah—off to her young husband, Master Charlie Fleming.'

'Jordan, Jordan! Is this true? Her husband? Ye bewilder me. Are they wedded then? Is she gone to Ireland?'

'Sure enow! O Mistress Deborah, I come to ask forgiveness! It isn't for the like o' Jordan Dinnage to have his daughter Mistress Fleming; but dear heaven knows I know'd naught, an' never sought it out, nor had high notions. Mistress Deborah, I ask forgiveness, an' I hope the master'll forgive me.'

Deborah took the old trembling hand. 'The master is in no state to blame or to forgive. But, Jordan, thou may'st give me joy o' this. It gladdens mine heart in my sore troubles like a sunbeam on a dark, dark cloud. Forgive thee? Ay, I am proud to be Margaret Fleming's sister; an' well believe my father would bid her welcome too—faithful honest Jordan. Now come, Jordan, come, and see how he lies. He knows me not, and he calls ever upon Charlie. Hast sent my letter to Ireland? Hast the address?'

'Ay, ay; it's gone.'

'Then I will write again to-night. Heaven send he may come in time. Sometimes, Jordan, he lieth in a stupor; again he calls for Charlie or for me.'

Reverently pulling his white forelock, with his old habit of respect, to his fiery but beloved master, Jordan stood at the foot of the bed, and saw the shadow of death on the face of Vincent Fleming.

'My boy,' murmured the dying man, with his eyes upon Jordan—'my boy Charlie!'

Old Jordan gazed helplessly and sorrowfully from him to the doctor who stood by, and Marjory, who entered. 'What's to be done?' he muttered. 'It kills him!'

'Patience, patience!' whispered the solemn doctor; 'he may see his son yet. There is great hope for him, Mistress Fleming; keep good heart.'

'Not hope of his recovery, Master Allan,' said Deborah, with stern and still despair. 'I know death when I see it. You have held out hope before; yet make him live till my brother comes. Ye hear me, Master Allan?'

'Ay, Mistress Fleming; I will use my poor skill to the utmost. Bear up. I will return to-night, Mistress Fleming;' and with a courtly bow, he left her.

But for Deborah, she kneeled beside her father, and with old days and old memories her heart was like to break. Jordan was weeping bitterly; she heard the old man's sobs; but on her own heart a still Hand was laid, enforcing strength and calmness. For two things she prayed: that Charlie might come in time; and that her father might be himself before he died, to hear that Charlie had ever been true to him. And so through the long night she watched; and old Marjory off slept and nodded, as age and dulled senses will; and though Sir Vincent at times called plaintively for his Deb, his 'Rose of Enderby,' his more frequent plaint was for his boy.

CHAPTER THE THIRD.

In those days there were wild doings in Ireland. 'Liberty and Reform' were the watch-words which did then, and ever will, electrify the fiery, rebellious, ardent spirits that flocked under one banner to struggle and to die. Irish and French met and fought together against the iron hand of England; thousands perished; the fated isle ran blood.

It is the eve of a battle. Gray dawn is slowly breaking over forest and mountain, where strange and wonderful echoes are wont to be heard amongst the rocks and caves; but in the gray of this dread dawn, on the eve of battle and blood, all seems silent as the grave, saving the thunderous roar of the waterfall in its descent into the lake, that seems to make the silence the more intense.

But hark! through the mist of morning a bugle suddenly sounds loud and clear; and when it ceases—far away, a spirit-bugle answers. A soldier, driven to frenzy, they say, by an insulting taunt from a superior officer, had struck him down in the heat of the instant. Short shift in those days; the man has been tried, condemned, and is about to be led out to execution. So, loud and clear the bugle calls: 'Come forth to thy death, as plain as a human voice could speak; and he whom it summons cannot mistake that voice, and comes forth guarded, but with steady step, and head erect and soldierly; while in front of him bristles a long line of musketry, and behind yawns an open grave. The condemned soldier is Charles Fleming. Have his ungovernable passions and his strong uncurbed will brought him to this? Ay; and the stubborn pride which has ever been his bane, leads him now to die without that word of extenuation or appeal which even yet might save him.

Yet who may tell how that proud heart swells well-nigh to breaking beneath the broad breast, as he thinks on the old white-haired father and his son's death of shame! He sees too the shadows on the woods of Enderby. He hears the voice of a little sister, calling 'Charlie, Charlie!' at play. And the trees are waving their long arms round the old, old home; and his little playmate Margaret—his young wife Margaret—stands beneath and smiles. And then his bold eyes ask for death, merciful death, which shall put him out of his anguish. Yet hold! Even as the muskets are raised, but ere the triggers are pressed, there is a wild shriek of 'Rescue! rescue! Pardon! pardon for Charles Fleming!'

And there, headlong down the way—while all

reel back before him—rides one spurring for life or death, his horse in a lather of foam, his head bare, and his long hair flying in the wind. In one hand he clenches a packet, and waves it above 'his head—the Royal pardon! He reaches them; he stays the deadly fire with his wild outstretched arms raised to heaven, with white face and blazing eyes, and lips which fail to speak. But *we* could have undertaken and accomplished that famous ride; but *one* could have saved him in this strait. In male disguise, that *one* proves to be Margaret Dinning! 'Tis my wife! cried Charles Fleming in piercing accents; 'tis my wife Margaret!' And with that, the king's messenger sways in the saddle, and is supported to the ground by the commanding officer. . . .

And thus it came to pass that Deborah, watching at her father's bedside, heard rumours of that battle by which the name of Charles Fleming became famous. It was early morning. The great wild clouds of dawn were parted, and rolled asunder. The glorious sun rose on the watcher's weary eyes, and steeped the land in splendour. Deborah threw up the windows wide, and returned to the dying man. O heaven, tender mercy, cannot the light of summer sunrise port that dear face of aught of its wintry wanness?

'Father, sweet father!' she said in thrilling tones of grief, 'art thou not better? See the glorious sun, father!'

'Nay, Deb,' he answered plaintively; 'I see no sun; mine eyes are dark. How little thou dost look to me! Thou'rt grown so small! My child, my darling, I am very ill.'

Then Deborah raised his head upon her shoulder; she knew that he was himself again, himself but to die; her brave heart sank, yet she answered calmly: 'Yes, thou hast been very ill. Dost thou remember all that happened?'

'Ay, ay. My boy, my boy!' And he sobbed. 'Hush, father; that was wrong; that was false! That was wicked forgery. Charlie never wronged thee by thought or deed. Charlie hath ever been loyal to thee and thine. Art thou content now, dear?'

A brilliant smile stole over the fading face of Vincent Fleming. 'Ay,' said he, 'content to die!' He lay musing, his eyes closed. 'Deb,' said he at last, 'whisper me. My boy is true to me—is't not so?'

'Yes, father; true as steel: he loves thee dearly. And for *thee*,' she went on, with heaving breast, 'he hath done brave things! Charlie is a soldier, and men are all saying he hath won great honour and renown.'

'Ah, Deb: thank God, thank God for this! And thou, Deb, sweet Deb, how is't with thee?'

'I am rich, dear. I am betrothed to King Fleming, whom I love most dearly; and I have wealth enough for all. It is well with thy two children, thou seest.'

And ere the night fell, two messengers came gently to his side. One, radiant with 'white raiment' and drooped wings; the other, footsore, travel-stained, and war-worn. And one was the Angel of Death, who stood and looked upon them pitifully; the other was his prodigal son, who kneeled and folded his arms around his father, and bowed his head and wept.

'Now,' said Sir Vincent, 'I die in peace. How

have I yearned for thee! God bless thee! I bless thee, my boy! Deb, this is death!'

And so, raised in Charlie's strong arms and with his hands in Deborah's, without a struggle, the spirit passed away.

CHAPTER THE LAST.

Two figures stand together in one of the deep oriel windows of the old hall at Enderby. The blood-red splendour of a setting sun fills the marsh, the low land, and the hanging woods; and streaming like a beacon in at the windows, floods those two with radiant light. They are Charles Fleming and his bride. The storms have swept by, and left her thrice his own, with the old walls and the sacred hearth of Enderby. Thus may God send on us the lightning of His chastisement, and yet guide and guard us through all—through the morning of wild and sunny childhood; through the noon of gay and love-bright youth, environed as it is by perils; through the sudden-falling night of dread, despair, and death. He does not leave us 'comfortless.' As for Deborah Fleming, passionately as she loved the beauteous world, she never again lost sight of the valley up which had passed the souls of those she loved, and the golden gates across the shining flood. And in later days, when children's children clustered eagerly round the stately old Lady of Lincoln, she, with the faithfulness of old age, would return lovingly, lingeringly to the days of her youth, when 'Charlie and she were young.'

O happy time—blessed childhood—how can I end better than with thee? Over the shadows of evening rises the day-star of childhood's memories.

It knows no night—

There is no night in a glad and green old age.

THE END.

CHARLES DICKENS'S MANUSCRIPTS.

A GLIMPSE of the manuscripts of the late Charles Dickens, which now form part of the 'Forster Collection' in the South Kensington Museum, conjures up a vision of numerous characters in his popular novels. On looking attentively at the manuscripts, we are at once struck by the number of alterations and interlineations with which the pages abound; and our first sentiment is one of surprise that the books which appear so wonderfully natural and fluent when we read them, should evidently have been the result of much anxious thought, care, and elaboration.

The collection comprises the original manuscripts of the following works: *Oliver Twist*, published in 1838-39; *Master Humphrey's Clock*, comprising the *Old Curiosity Shop* and *Barnaby Rudge*, published in 1840-41; *American Notes*, 1842; *Martin Chuzzlewit*, 1843-44; *The Chimes*, Christmas 1844; *Dombey and Son*, 1846-48; *David Copperfield*, 1849-50; *Bleak House*, which has in the original manuscript a secondary title, *The East Window*, 1852-53; *Hard Times*, 1854; *Little Dorrit*, 1855-57; *A Tale of Two Cities*, 1859; and *The Mystery of Edwin Drood* (his last but unfinished

work), 1870. There are also proof volumes from the printers, consisting of *Dombey and Son*, *David Copperfield*, *Bleak House*, and *Little Dorrit*, the pages of which bear marginal and other corrections and alterations, in ink, by the author.

Of course, as the collection is placed under a glass case, the public can only see one or two pages of each work; but even with this meagre guide, the acute observer is able in some degree to trace the working of the writer's mind, and to follow to some extent the development of his ideas. As we have already remarked, the first thing which strikes us is the comparatively large number of alterations and interlineations which occur in the manuscript. It is evident that Charles Dickens wrote with the greatest care, and scrupulously revised his writing, in order to render each sentence as perfect as might be. Taking the works in their chronological order, we may notice that in *Oliver Twist*, which is open at 'Chapter the Twelfth'—'In which Oliver is taken better care of than he ever was before, with some particulars concerning a certain picture'—there are few alterations in the manuscript; the writing also being larger and firmer than in the majority of the later works. Charles Dickens made his alterations so carefully that it is difficult to trace the words which he had originally written; but the one or two which occur on this page give us some little insight into the careful manner in which the author worked up his sentences into a well-rounded and euphonious form. The passage at which this manuscript is opened runs as follows: 'The coach rattled away down Mount Pleasant and up Exmouth Street—over nearly the same ground as that which Oliver had traversed when he first entered London in'; and here occurs the first alteration, 'the D—' is erased, and 'company with the Dodger' is written in its place; the author evidently considering the latter a more euphonious form of expression than 'in the Dodger's company,' as it was doubtless his original intention to make the passage. The alteration to which we have referred may appear, as indeed it is, of exceedingly small significance; but we have mentioned it simply as an instance of the extremely careful way in which Dickens studied the details and minutiae of composition.

The next manuscript in point of date is *Master Humphrey's Clock*, which is open at 'No. IV,' headed 'Master Humphrey from his clock-side in the chimney corner,' and commences as follows: 'Night is generally my time for walking. In the summer I often leave home early in the morning and roam about fields and lanes all day, or even escape for days or weeks together, but, saving in the country' [this originally stood 'but, at other seasons of the year;'] but Dickens doubtless saw that the expression as it now stands would be more consistent with the context, 'I seldom go out until after dark, though, Heaven be thanked, I love its light and feel the cheerfulness it sheds upon the earth as much as any creature living.' This page of manuscript has only a moderate share of alterations.

Then we come to the volume of *Barnaby Rudge*, which is opened at 'Chapter One,' and also contains only a moderate number of alterations, one being in the height of the Maypole sign, and another in the distance of Epping Forest from Cornhill;

both of which are noticeable as further illustrations of the conscientious love of accuracy which characterised the author's mind. Next in order follows the *American Notes*, which has very few corrections, and is opened at the page headed 'Chapter the First. Introductory and necessary to be read;' in which the author challenges the right of any person 'to pass judgment on this book or to arrive at any reasonable conclusion in reference to it without first being at the trouble of becoming acquainted with its design and purpose.' Surely a caution fair and reasonable enough on the part of the writer of a book which he could not but feel would probably give offence, where such an end was farthest from his wish.

The Life and Adventures of Martin Chuzzlewit comes next, open at 'Chapter I. Introductory. Concerning the Pedigree of the Chuzzlewit Family;' and giving us a brief but telling satire on the pride of birth by assuring us that this family 'undoubtedly descended in a direct line from Adam and Eve, and was in the very earliest times closely connected with the agricultural interest.' This page is notably full of alterations, and seems a fair indication that with Charles Dickens, as with many others, the first step was the most difficult of all. The caligraphy in this as in all the other manuscripts is legible but rather small, the letters being distinctly formed, and the use of abbreviations studiously avoided.

We next turn to *The Chimes*, one of those delightful stories with which Dickens introduced to us those Christmas annuals, which now form so important a section of our periodical literature. This again is open at the commencement, where the author lays down the dogma that there are not many people who would care to sleep in a church: 'I don't mean at sermon-time in warm weather (when the thing has actually been done once or twice), but in the night, and alone.' This sentence originally finished with 'in the night;' but we can readily imagine the development of the idea in the brain of the writer; and the words 'and alone' suggesting themselves as lending an additional ground of fear for the situation. The manuscript of this page bears a moderate number of alterations.

In *Dombey and Son* we find a large number of alterations on the first page, the very title itself having been altered more than once. The sketch of the newly-born Paul, who was placed in front of the fire, 'as if his constitution were analogous to that of a muffin, and it was essential to toast him brown while he was very new,' is very good indeed; but it is evident that the passage was rather the result of careful elaboration than of spontaneous humour. And the same remark will apply to the opening chapter of *David Copperfield*, in which, although the passage descriptive of the birth of the hero is very neat and natural as it now stands, the same careful revision and alteration are again apparent.

Bleak House too is notably full of alterations on the first page, especially in the passage which tells us that in the muddy condition of the London streets 'it would not be wonderful to meet a Mesosaurus forty feet long or so waddling like an elephantine lizard up Holborn Hill.'

In *Hard Times*, where we are introduced to the gentleman who wants nothing but 'Facts,' and in the opening chapter of *Little Dorrit*, in which we

have a description of Marseilles as it 'lay broiling in the sun one day,' we find a large number of alterations; but in these, as in most of the other instances, the primary words have been erased so carefully, that it is next to impossible to form an idea of how the passages originally stood. *The Tale of Two Cities*, on the contrary, contains remarkably few corrections; and the opening passage descriptive of 'The Period' is telling, and apparently written spontaneously. *The Mystery of Edwin Drood* has been opened with good judgment at the last page. The manuscript is very small, but fairly legible, and having but a moderate number of alterations. In a literary sense, it is not perhaps so interesting as some of the others; but it possesses a sad and melancholy claim upon our attention and sympathy, inasmuch as it is the last page of manuscript ever written by this gifted hand.

In the proof volumes with corrections in the handwriting of the author there is nothing which calls for especial note save an unimportant deletion in *Bleak House*, and a more interesting alteration in *David Copperfield*. In the former there is a passage marked 'out,' in which Sir Leicester Deedlock speaks to Mrs. Rouncewell of her grandson in the following passage: 'If (he said) the boy could not settle down at Chesney Wold, in itself the most astonishing circumstance in the world, could he not serve his country in the ranks of her defenders, as his brother had done? Must he rush to her destruction at his early age and with his parricidal hand strike at her?'

In *David Copperfield* we find by a passage in which Mr Dick is referring to his Memorial that his original halleluination took the form of a 'bull in a china shop;' a rather trite idea, and it was not until after the proof had actually been submitted to him by the printers that Charles Dickens introduced the whimsical and happier notion of 'King Charles's Head.'

Before bringing our brief paper to a conclusion, we would venture to suggest to the gentleman or gentlemen to whom it is entrusted the arrangement of these manuscripts, that the present positions of the manuscripts and printed volumes should be transposed, so that the manuscripts should occupy the lower half of the case, as in their present position it is rather difficult to decipher the caligraphy; and to any one below the ordinary height it must involve an amount of physical contortion as uncomfortable as it is inelegant. The manuscripts being of course of greater interest than the printed proofs, should certainly occupy the more prominent space, especially as the latter could be read without any difficulty if placed in the rear rank.

We have no doubt that many of those who read this short article will have seen the Dickens manuscripts for themselves; many more doubtless will see them; but there will still be a large number who will not have the opportunity; and while we think that our remarks will be endorsed by the first and second classes, we hope that they will prove interesting to the third less fortunate class, and will enable them to enjoy, at least in imagination, a somewhat closer intimacy than they have known before with that great and gifted man, whose books have effected so many beneficial changes both in society at large and in many an individual heart and life, uprooting and casting to the winds much

that was base, worthless, and contemptible, and implanting in their stead the seeds of those gentler sympathies and nobler aspirations which find their fruition in a well-spent life.

THE ADMIRAL'S SECOND WIFE.

CHAPTER XII.—OTHER EVENTS OF THAT EVENING.

LADY DILLWORTH'S reverie is doomed to be a short one. She feels a soft caressing touch on her arm, and looks up to see Miss Delmere close by her chair. Her long light hair is streaming over her shoulders, and an embroidered Indian dressing-gown covers her antique dress.

'Liddy, you quite frightened me! Why do you come creeping in like a mouse? You ought to be in bed.'

'I have something to tell you, Katie; something you will be so glad to hear, and something that makes me so happy. I cannot sleep till I tell you all about it.'

Miss Delmere flings herself on a low stool at Katie's feet, and looks up through her mass of sunny hair with flushed cheeks, glowing eyes, and lips that will form themselves into smiles. She cannot hide her joy.

'Walter Reeves has asked me to be his wife. Are you surprised, Katie?'

'Not exactly; I thought there must be some outcome from all that flirting. Do you know, Liddy, if he had not made you an offer, and if you had not accepted him, I should have been very angry, and should have given you a lecture.'

Liddy looks up at her friend with surprise, the words are so cold, the tone of voice so hard and unsympathising.

'Are you not glad about it, Katie?'

'Of course I am; and I hope you will both be happy.'

'I owe it all to you, darling Katie! Had it not been for this dear delightful charade party, I should never have found out that Walter really cared for me. How sudden it has all been! And what good news I shall have to carry home to-morrow! Little did I think when I came to stay with you, that my wedding was so near! The words came out in joyous gasps between hugs and kisses, for Miss Delmere is demonstrative, and shews it.'

Then Liddy flits away, radiant in her delight, never dreaming of the anguish in Katie's heart that constrains her again to bury her face in her hands, and utter short, eager, impassioned prayers for the poor sailors whom she believes are at that very hour in dire and mortal conflict with the winds and waves.

But we must take a glimpse at Sir Herbert's proceedings. He never even glances at the order after his wife's fingers have altered it to her will; he merely folds it up, puts it in the envelope, and despatches it to its destination. Though he decides the *Leo* shall proceed on the dangerous enterprise, no thought of malice towards Captain Reeves actuates him. It never enters his thought that it is a good way of getting rid of him for a while, and thus stopping the constant visits to Government House. The idea is altogether too paltry and despicable—it is beneath a man of Sir Herbert's tone of mind. He fixes on that particular ship simply because she is best fitted for the duty. Weighing anchor in such a storm near the Short

Reefs on an iron-bound coast, and rendering assistance to a vessel in danger, is an undertaking that requires a good ship, a steady crew, and an able captain.

All these qualifications the *Leo* possesses to perfection. She is a well-built handsome craft; her hardy tars are smart and well disciplined; and there is no braver officer in the British navy than Walter Reeves. True, when on shore he seems rather too fond of amusement, and has been called 'conceited,' 'trifling,' 'frivolous,' 'dandified,' and what not, by men who are jealous of him; but let his foot once touch the quarter-deck, and even his enemies can never charge him with these questionable qualities. There all his frippery and nonsense vanish away like dew in the sunshine; and he becomes the true sailor, with courage to plan and carry out deeds of daring; he becomes the gallant officer fired with vigour and ambition. Never would he shirk a duty or hesitate to undertake any lawful enterprise even though it led to danger or death. Sir Herbert knows all this, and therefore he is right in selecting the *Leo*.

Hardly has he sent away the order when he is called off to Hillview; and when his duties there are over, he determines to pay a farewell visit to Lady Ribson. He thinks of Katie all the way he is going to Belton Park. But when is he not thinking of her? His love has not lessened, though he has begun to see her faults. He is sorry she is not with him, and that she has never paid the needful respect to his god-mother. He has often and often urged her to call, but his persuasions have failed. Whenever he has made the suggestion, Katie has been so overwhelmed with engagements that she has hardly given him a hearing, and of late he has dropped the subject. He goes towards Belton Park in rather a gloomy mood after all. Lady Ribson quite expects Katie on this last evening, and while she welcomes the Admiral, she looks over his shoulder inquiringly.

'Ah! I knew you would come to say "good-bye," Herbert. But where is the "gudewife," the bonnie Katie?'

'Miss Delmere is staying with her, and she has many engagements; besides, you could hardly expect her out in this storm.'

'Ah no, certainly not. There are many reasons for Lady Dillworth's staying at home, and but few inducements for her to come out to see an old woman like me.'

'Katie has often said how anxious she is to know you.'

'True, true, Herbert; so you must bring her to Scotland with you in the bright summer-time—that is, if I'm spared to see it; but life is uncertain, my friend, life is uncertain.'

Lady Ribson, who is the brightest, kindest, dearest old woman in the world, smiles on her god-son, and does not let him see how much she is hurt by Katie's neglect of her; but in her heart she is sorry for him, more sorry than she would like him to know. Bessie his first wife was in her opinion perfection; and Katie she suspects is very much the reverse.

To her old eyes, the Admiral is still young, and she thinks there is hardly a woman in the world good enough to mate with him. 'I can see Herbert is not happy; and Laura Best was right when she foretold the risk her father ran in marrying a mere frivolous girl,' she decides in her own

mind; but none of her suspicions float to the surface, so gay, so kindly, so warm is her manner. The Admiral sets out early on his homeward journey; his thoughts still turn to Katie, but they have grown softer, more tender. The gloom has passed from his spirit; the interview with Lady Ribson has calmed his ruffled thoughts; his reserve and pride have altogether melted down, and he longs to press his darling wife to his heart and forgive all her follies. He feels, even with all her failings, he loves her more completely, more passionately than he has ever loved the dead Bessie.

When he reaches Government House, it is brilliantly lighted up. The guests are assembled, and fragments of song and melody are floating out on the rough night-wind. Sir Herbert makes his way at once to the scene of festivity, and pauses at the door, astonished at the unwonted appearance of the rooms. As he has not been initiated into the arrangements, nor witnessed the preparations, the merest stranger present is not more ignorant than he is of all that has been going on. So he looks on the scene with curiosity. The music-room has been turned into a raised stage, with painted wings and festoons of scarlet curtains. A crescent-shaped row of gas jets serves as foot-lights, and throws a soft clear brilliance on the performers. Wreaths of flowers, clusters of trailing evergreens, pots of rich exotics, groups of banners, add to the display. Nothing that taste, art, fancy, or money can accomplish is wanting. The Admiral looks at all this; then at the rows of spectators; then at his wife, who comes forward on the stage at that moment leaning on Liddy's arm. Presently their voices ring out through the rooms; then a solo falls to Katie's share, and her husband listens spell-bound to her singing. Her voice is tuned to the deepest pathos, and her face is sad as her song.

Never has he seen Katie look like that before. The curiously cut costume suits her wonderfully well; the dress of azure silk falls in rich bright folds; her bodice glitters with gold and gems; and her hair turned back in its own luxuriant wealth of tresses, has no ornament but a diamond cluster. The mellowed rays from gas jets, hidden by the curtains, fall full on her head, and she shines out as though surrounded by a strange unearthly glory.

She seems altered, spiritualised, refined, incorporated in her marvellously weird-like beauty, and her husband cannot remove his rapt gaze from her. But presently a single turn of his head changes his glance of admiration into one of surprise and anger. In the shade of a gigantic azalea he spies Captain Walter Reeves, standing in an attitude of calm listening enjoyment. Instantly the Admiral's eye flashes with indignation. How dares Walter Reeves to be here, in his wife's drawing-room, when he ought to be miles away out on the stormy seas?

In an instant the offender is called out of the room, and Sir Herbert demands to know why he has disobeyed orders by staying on shore.

'I have had no orders to weigh anchor, Sir Herbert.'

'Perhaps the order is still lying on your cabin table; it was issued at ten o'clock this morning.'

'No despatch has reached the *Leo*, for I've been on board all day, Sir Herbert, and came direct to Government House.'

'Very strange, very! There must be some terrible mistake in the matter. Is Mr Grey here to-night?'

'No, Sir Herbert.'

'I must see him at once. The subject admits of no delay.'

'Shall I go to North Street, and fetch him here?'

The Admiral pauses for a moment, and takes a survey of Walter from head to foot. He notes the velvet suit, the delicate lace ruffles, the Montoro cap, the large plume of feathers, the dark cloak set so jauntily on his shoulder, the thin shining shoes, and the huge glittering buckles; and a *souffron* of contempt glances from his eyes, a slight sneer trembles on his lip. 'I think I am more fitted to brave the storm than you are to-night, so I'll go to Mr Grey myself! Then without another word, he walks down the stairs, and passes out into the wind and rain. The house in North Street is closed for the night, and Mrs Grey and Helen are sleeping the sleep of the quiet-minded. Only the master of the house is still up, and he is finishing a cigar in his library. He starts up in alarm when he hears the authoritative knock at the door, and visions of fire and thieves start up before him. His alarm is in no whit lessened when he sees his august son-in-law on the steps.

'Sir Herbert! Who would have thought of seeing you so late! Is anything wrong? Is Katie ill?'

'No; your daughter is quite well. I left her just now dressed up like some medieval heroine, and lamenting her woes in song.'

'True; I recollect this is the night of Katie's charade party.'

They have both gone into the library now; Mr Grey has flung the stump of his cigar aside, and the Admiral speedily explains the cause of his late visit.

'I acted as your note directed, Sir Herbert, and at once sent off the *Leoni* to assist the *Daring*.'

'The *Leoni*! Were you mad, Grey?'

'I confess your order amazed me. I did all I could to consult with you about it, but you were gone to Hillview. Here is the order; you will see the *Leoni*'s name written plainly.'

The Admiral takes the paper in his hand, holds it near his gaze, scrutinises it afar off, glances at it through his eye-glass; but the fact is indisputable—there is the word *Leoni*, apparently in his own writing.

'This is a vile forgery, Grey! I never wrote that, never dreamt of giving such a mad order. Heaven alone knows what results, what complications may arise from it! I shudder to think of the *Daring* still aground on the Short Reef, or perhaps altogether broken up long ere this.'

'The *Leoni* couldn't help her much, I fear.'

'Help her! She'll never reach her. I should not be surprised if she were a wreck herself by this time; a hideous, top-heavy, unmanageable craft like that couldn't take care even of herself in such a storm.'

'What had better be done now, Sir Herbert?'

'Despatch the *Leo* at once; though I fear her services will come too late.'

Practical discussions follow, that keep the Admiral and his secretary employed for some time longer. When Sir Herbert returns home, it is

no vain excuse that makes him retire to his room in very weariness of spirit, very fatigue of body. He finds Walter Reeves is already gone away; but some of the guests are still lingering in the rooms, trying to prolong their amusements to the last minute.

CHAPTER XIII.—CONFESSION.

The storm has spent itself before the next morning. Katie can see that, as she listlessly looks out of the bay-window of the breakfast-room. One would hardly suppose the treacherous gale had been holding such wild revels the night before. The tossing waves that had leaped with frothy crests over the serrated rocks of the Short Reefs, are placid enough now—dancing perhaps over those who went down a few hours before into the cruel depths. Lady Dillworth has a headache; she listens calmly to Liddy, who blushing and blooming, pours forth her rose-coloured confidences, and swallows her coffee between whiles. Hunter is helping the groom to carry her boxes down-stairs; and Miss Delmore, with only a few minutes to spare, is selfish in the exuberance of her joy, and cannot see the dark circles round Katie's sleepless eyes nor note the deep sadness of her looks. At length she goes away, and the Admiral enters the room.

'You are just in time, Herbert; Hunter has brought up some fresh coffee.'

'None for me, thank you. I knew you would be engaged with Miss Delmore; and as I had papers to examine, I had my breakfast brought to the library.'

'Liddy is gone away now.'

'Yes; I met her in the hall, and saw her into the carriage. I've brought you the newspaper, Katie; you will see the wreck of the unfortunate ship I told you of yesterday.'

'The *Daring*? Is she wrecked?' Katie takes the paper into her trembling hands, but cannot read a word for the throbbing of her brows and the dizziness of her eyes.

Her husband goes on: 'Yes; she went to pieces in the gale, and every soul on board would have gone down with her had not a merchant-ship passed by the merest chance. Twenty-three men are lost. At least they went away in the *Daring's* large cutter; but no boat could have lived out the storm.'

'How dreadful!' Katie starts at the sound of her own voice, it is so deep and hoarse.

'Dreadful indeed! What makes the matter worse is, that in all human probability every man might have been saved and the ship also, had not an atrociously wrong act been perpetrated.'

Katie hears a rustle of paper; she knows by instinct what is coming, but she dares not lift her head.

The Admiral goes on in an agitated tone: 'Some one has tampered with my papers, has even dared to meddle with my orders. I directed the *Leo* to be sent out at once to the scene of the wreck; but from malignity or some other motive, the name *Leo* was substituted.'

'Couldn't that ship do as well, Herbert?'

'Certainly not. She would never reach the Short Reefs in such a gale. I fully suspect she's foundered at sea or gone on the rocks herself. I'll find out who did it! If I thought Reeves, or

any one else at his instigation, had been guilty, I'd, I'd'—

There is no saying how the sentence might have ended. Katie has risen from her seat, and stands before her husband trembling.

'I did it, Herbert! I altered your order!'

'You, Katie!—you, my wife!'

'Yes; but I never thought my silly act would lead to such misfortune.'

'What was your motive, Kate? Surely you could not have wished to injure me? To set me up as a mark of inefficiency and ridicule?'

'O no; a thousand times no. But Captain Reeves was helping me to get up our charade, and I altered the ship's name that he might not have to go away.' Here Lady Dillworth's voice fails her. She cannot utter another word, so choked and gasping is her breath; the bare blank sentence remains as it was: 'I altered the ship's name that he might not have to go away.'

The Admiral does not reply. There is a stillness in the room as though some one had died there. A burst of passion, an angry storm of words would be a relief; and Katie glances up in alarm to see her husband looking down sadly at her. He is pale as death; his lips are set and firm; a dim haze has clouded his eyes, as though unshed tears are springing there; but there is no sign of resentment in his face—only pity, a tender, touching, tremulous pity, an infinite yearning for something gone, a regret, sorrowful and deep! Yet all so mixed with intense love, that Katie knows for the first time in her life what passionate boundless strength there is in his affection for her. A sudden understanding of how dear she is to him dawns upon her; she feels he would give his very life for her.

Katie would have flown to his arms, and told him his love is fully returned, that at last she feels his worth and goodness; she would have fallen at his feet and there have craved for pardon; but he puts her gently yet firmly away.

'My poor, poor Katie! Have I then spoiled your young life? I might have suspected this; but I was blind and selfish. Forgive me, my poor child, forgive me! I would give worlds to restore you your freedom again!'

Ere Katie has fully grasped the meaning of his words, he has gone out of the room; she hears him walk rapidly down the stairs and out of the house. A sense of numbness creeps over her; she sits for a while like one stunned. How long she remains crouching on the sofa she never knows; a whole lifetime of anguish seems crushed into that space. All the brightness of youth appears to die out at her husband's departure; his retreating footstep sounds like a knell of departed hope.

After a time, Lady Dillworth rouses herself; even sorrow cannot endure for ever. She recollects it is near the hour for luncheon, and then Herbert will come home. She dresses herself in the robes she had on when he made her the offer of marriage. *Why* she has done this, she does not confess even to herself; but perhaps she imagines old associations may soften present misunderstandings. She goes down to the dining-room and waits. The table is laid for luncheon, and the bright fire glitters on the silver and glasses and flowers. All is so pleasant and cheerful and homelike! And even then a thrill of satisfaction comes over her

that now Liddy Delmere is gone she will be able to devote all her time to her husband—have him all to herself. But the luncheon hour passes, and then the door opens and Hunter enters with a letter on a silver. The address is written in a rapid unsteady hand, as though the fingers trembled. She sees it is Sir Herbert's writing, and tears open the envelope with a sense of impending trouble, that blanches her cheeks and chills her heart. The words run thus:

'No one shall ever know you did the mischief, my poor Katie; the blame shall rest on me alone, and I will bear it willingly for your sake. But my professional career is over; men will never again trust my judgment or deem me fit to command. I was proud of my standing in the service and of an untarnished reputation; but you have spoiled it all, merely to enjoy a short interval more of Walter Reeves's society. Why did you not tell me he was so dear to you? You should have said before we married I could never make you happy. Yet I will not blame you, my poor wife. My own selfish blindness has caused all this misery. Before this letter reaches you, I shall be on my way to London to resign my appointment.'

This was all! But the contents fell like a blow on her heart. Katie sits alone in that quiet room while the iron pierces her soul. The untasted luncheon stands on the table till the fire goes out and the shades of night gather round. Then Hunter knocks at the door in alarm, to know if 'my Lady' will have the things removed. Katie rouses herself to tell him that while his master is away she will henceforth have her meals laid in her boudoir, and that she will receive no visitors in Sir Herbert's absence.

Hunter sees her pallid face and tear-stained eyes, and draws his own conclusions, and thinks things 'never went on like that in the first Lady Dillworth's time, anyhow.'

THE GUACHO.

'WILL you ride over with me to the neighbouring village?' asked my friend Senhor Pedro da Silva. 'There is a *festa* there to-day. And as you are a stranger in the country, you will see some feats of horsemanship quite as clever as can be shewn in the circus rings of old England.'

'With the greatest pleasure,' I replied. 'I have often heard of the wonderful horsemen called Guachos, and desire much to see if the accounts are really true.'

'I think you will not be disappointed. He and his horse are one; sometimes he acts as its tyrant, but more frequently they are friends. From infancy they have scoured over the immense Pampas of South America, frequently amidst violent storms of thunder, wind, and rain. His address and grace on horseback yield neither to your best fox-hunters nor to the American Indian. But here is Antonio with our steeds; let us mount.'

An hour's ride over the dull arid plains of Buenos Ayres, covered with the grass now so much cultivated in our gardens, and admired for its light feathery tufts waving in the wind, brought us to San Jonchin, where the people were already collecting in their holiday attire, and exchanging friendly greetings on all sides. The gay striking dresses of the Guachos mingled in every group.

The *poncho* or mantle of cloth, woven in bright coloured stripes, has a hole in the centre through which the head is passed, and falls down to the hips in graceful folds. The nether garment is a combination of bedgown and trousers, bordered by a fringe or even rich lace on these fast days, which varies from two to six inches deep according to the wealth of the wearer. Then to-day the great jack-boots of untanned leather are exchanged for the smartest patent leather, with bright scarlet tops, and enormous spurs at the heels. A wide-brimmed Spanish hat is worn, a purple or yellow handkerchief twisted round it; whilst the belt encircling the waist sparkles with the dollars sewn upon it—often the whole fortune of the owner. His weapons are attached to this girdle, consisting of a formidable knife, a lasso, and a bolas, which may not be so familiar to the English reader as the lasso. There are two balls fastened together by short leathern straps, to which another thong is attached, by which it is thrown; this is whirled violently round the head before propulsion, and entangles itself in the legs of the horse or cow to be captured.

But whilst we are gaily chatting to Senhor Pedro's many friends the games are beginning, and we hasten off to the ground. There we find two lines of mounted Guachos, from ten to twenty on each side, just so far apart as to allow a rider to pass between the ranks; all are on the alert and holding the lasso ready for use. One whom they call Massimo, an evident favourite with the crowd, comes tearing along at a gallop and dashes in between the lines. The first horseman in the ranks throws his lasso at Massimo's horse as he flashes past, but misses, amidst the derisive shouts of those around; then the second, quick as lightning casts his; and so on down the ranks. Presently, however, the horse is lassoed and brought to the ground; and the skilful rider alights uninjured on his feet, smoking his cigarette as coolly as when he started from the post. The dexterity and watchfulness of the men, who can throw the lasso so as to entangle the feet of a horse while going at full speed, are simply wonderful. Another and another followed with varying fortunes; sometimes the first struck down the horse and rider, rarely was it that one escaped altogether. The popularity of the famous chief Rosas was said to be founded on his proficiency in this adroit but cruel art, and no man can be their chief who is not the cleverest among them: renown on horseback is the one great virtue that exalts a man in their eyes; cruelty to their favourite animal does not seem to enter into their thoughts!

But at length they weary of this sport, and move off a little way to vary it with another. Now we seem to have moved back a few hundred years, and find a pastime of the middle ages still lingering among these descendants of the Spaniards, who doubtless introduced it into the New World. In those days it was called the game of the quintain. A pole was firmly planted in the ground, with a cross-bar, to which was hung the figure of a misbelieving Saracen, well armed and holding a large sword. The horseman tilted at full gallop against this puppet; and as it moved lightly on a pivot, unless it were well struck in the breast, it revolved, and the sword smote the assailant on the back amidst the laughter of the crowd. Here in

the wild Pampas the trial of skill is greater. A kind of gibbet is erected, to which is hung a finger-ring by a string. The Guacho, instead of the spear of knightly days, holds a weapon more characteristic of his work in the *saladero*, where the cattle are killed and salted—namely, a skewer. One after another the Guachos gallop at full speed and try to push the skewer into the ring and carry it off. Antonio, Luis, and Melito succeeded admirably; but many a novice failed in the difficult task. Still it was a pretty sight, and enjoyed apparently by both horses and men.

Then came the inevitable horse-races, which are of almost daily occurrence, when associates challenge one another, and they strike off in a moment in a straight line until they disappear in the horizon. In this case, however, a wide straight avenue near the village was chosen for a short, rapid, and often renewed race; a pastime for the idle, and the occasion of ruinous bets. The riders were dressed with the greatest elegance; their horses well chosen from the corral, and covered with silver ornaments. The bridle is of the leather of a foal, finely plaited and mounted with silver; stirrup, bit, and spurs of the same metal. A glittering silver belt, sometimes of a flowery pattern, and of colossal proportions, hangs round the breast, and a silver strap across the forehead. The saddle is a wonderful piece of mechanism, forming the Guacho's 'bed by night and chest of drawers by day;' it is very heavy, and consists of ten parts; skins, carpets, and cow-hides intermingled with other necessities. Off they go at last from the post, spurring and urging their steeds like modern centaurs, handling them in a manner well worthy of admiration, and with the most perfect elegance. When the winner came in, many a by-stander had lost all his possessions, so mad a race of gamblers are they. As a last resource, they pledge their horse, and expose themselves, if they lose, to the lowest of humiliations—that of going away on foot!

We turned at last towards home, leaving the roystering spirits to finish off their day at the *pulperia*. This it is which takes the place of the club, the café, the newsroom, and the home. A cottage, neither more simple nor more luxurious than any other to be found in the Pampas, covered with thatch; the walls of dried mud, or more frequently of rushes sparged with mud; the flooring being of trodden earth; into which the rain penetrates, the sun never enters, and where a hot damp air is the prevailing atmosphere. Before the door stands a row of strong posts, to which the horses of the guests are tied; the new-comer jumps off, and there leaves his steed, saddled and bridled, for many weary hours in the hot sun or pouring rain; whilst he, to use a native expression, 'satisfies his vices' in the *pulperia*. The door is open to all comers, and great outward politeness reigns within; there is a continual exchange of gallantries, to which the Spanish language easily lends itself; but reason soon loses its sway, and the strangest bets are offered and taken. Sometimes it is between two friends as to who shall first lose blood; when the whole company sally out, knives are drawn between the duellers, and a combat, often much more ridiculous than valiant, ensues!

The following morning, Señor Pedro proposed that we should ride out and see the Guacho at

work and in his home. 'You seem to have been interested in him yesterday,' he said, 'and he belongs to a type that is unique. Notwithstanding the hatred of the original inhabitants towards their invaders, the two races were mixed, and these unions produced the Guacho. Look at his tall figure, bony square face embrowned by the sun, and stiff black hair—there you see the Indian; whilst the Spaniard is in his proud haughty manner, in his vanity, and also in his great sobriety. He drinks water and eats his dried meat without bread, not from contempt for better food, but from a horror of work. To earn his daily food is not so much his aim as to get money to bet with. He will go into the *saladero*, where, knife in hand, he will kill, skin, and cut up the cattle for salting, and find enjoyment rather than labour in it. He easily gains in a few hours a wage that suffices; and as soon as it is paid, he jumps on his horse and rides off to the *pulperia* to gamble it away.'

Thus conversing, we reached a hut which could scarcely be surpassed in its misery. Placed alone in the middle of the plain, without any garden or cultivated ground, not a tree to cast a welcome shadow, or a hand to repair the dilapidated walls, it seemed formed to repulse rather than attract the owner. At our approach, the mother came out, surrounded by her children, her complexion approaching the mulatto, for the air of the Pampas quickly destroys the fineness of the skin. It is only in the capital, Buenos Ayres, that handsome Creole types are to be seen, where fine features of an Indian class surpass European beauty, even when the tint is olive. The wife, like the husband, hates work: her only occupation is to boil some water, pour it over maté or tea of Paraguay, and drink it through a metal tube. Her children, at the age of three or four, can sit on horseback and gallop over the plain with no other bridle than a cord passed through the horse's mouth. At six they watch the sheep, and at ten are ready to break in the most spirited colts. Only everything they do must be on horseback: they will neither use their arms nor legs.

'Good-morning, *Señorita*,' said my friend. 'Where shall we find your husband?'

'He is gone, *Señor*, to break in some horses for *Señor Meliso*; it is not far from here.'

'So much the better. We will ride on and see him at work.'

We reached the place; and the Guacho came out to meet us.

'Will you shew my friend your seat at the gate?' said Señor Pedro.

'With the greatest pleasure,' answered the flattered Guacho. He jumped on to the top transverse bar which forms the gate of the corral, and calling to another man to open the lower ones and drive out a troop of horses at full gallop, he, with the most astonishing skill, singled one out with his eye, dropped down on to it, and rode off without saddle or bridle at the top of its speed. Soon returning, he proceeded to break a horse that had been previously caught in the plains. The Guacho threw two lassos, one over the neck, the other on the hind-legs. Several men hold the colt tightly whilst he saddles and passes a cord through the mouth of the animal; and when the first paroxysms of fear have passed, the tamer jumps on, and pressing his powerful knees into its

sides, the lasso is withdrawn. The horse and rider then start on a furious course, from which they both return exhausted, in the midst of the *vivats* which resound from every side. All that is now required is for the breaker to ride ten or fifteen leagues, when he gives up the horse to the owner and receives his fee. They are never taught to trot, but have an easy movement; and a man has been known to ride two hundred miles a day without fatigue, and living only on dried meat and maté.

THE GERM THEORY AGAIN.

We have on several occasions alluded to the Germ theory, by which is meant the theory that invisible germs capable of producing anæmicule and of spreading disease are constantly floating in the atmosphere—and that the more impure the air the greater are the number of these germs. We revert to the subject, because it is debated in all quarters, and it is as well that our readers should know something of what is causing so much controversy. Some surgeons distinguished as operators are great believers in the Germ theory; so much so, that before beginning, for instance, to cut off a leg, they cause a certain germ-killing liquid to shower like spray near the part operated on; by which, as is alleged, the wound is kept free of anything noxious. Whether there be germs or not, the use of disinfectants in the air is said to be beneficial. Notably the celebrated carbolic-acid plan of Professor Lister has met with marked success, and is practised by the greatest surgeons of our time. But though the air certainly contains something which favours decomposition, it is by no means yet proved that that something is made up of germs.

Professor Tyndall has been the principal advocate of the Germ theory, and has written some papers strongly in its favour. Professor Bastian takes an opposite opinion. He thinks that living organisms may originate in disease by spontaneous generation. His notions are that if germs are continually floating about in the air, they would drop everywhere and anywhere alike. This argument applies more forcibly to the fact which Dr Bastian discovered—namely, that he was able to get life in flasks containing inorganic solutions, but that he always failed if such solutions were not made up of salts containing oxygen, hydrogen, carbon, and nitrogen; that is to say, of the elements of life. If the organisms are really the result of a molecular arrangement of the 'mother-liquid,' we should expect to find them only in those fluids which already contain the elements necessary for their composition. Three speculations are involved in these experiments: on the one hand, that low forms of life do occasionally arise by spontaneous generation; on the other hand, either that the heat which is usually considered destructive of life and germinating power is in reality nothing of the kind; or that Dr Bastian's experiments were incorrectly performed.

Since the publication of Dr Bastian's observations, a very lively controversy has been carried on in scientific quarters between the supporters of the germ theory and of the theory of spontaneous generation. Dr Bastian's work was conducted with great care and in the presence of some distin-

guished authorities. Dr Sanderson, on the other hand, found that upon increasing the heat which is applied to the flasks, no organisms were produced; but until we have reason to doubt the generally received opinion as to the amount of heat necessary to destroy life, this result may be equally well explained according to either of the two theories.

Dr Bastian insists that the organic solutions in his own flasks are not found by him to undergo putrefaction where every precaution is taken for withholding the entrance of air. Thus a simple piece of cotton-wool, which acts as a kind of sieve, will when placed in the mouth of a flask prevent decomposition. Professor Tyndall has invented the most ingenious contrivances for illustrating his views. In one case he employed a chamber the walls of which were covered by a sticky substance. The particles of dust in the air were allowed to collect and adhere to the sides, and the air in the vessel, as shown by its non-reflection of a beam of light, was rendered comparatively dustless. Flasks were now introduced, and they remained for a long period free from organisms. On repeating some of these experiments this year, however, Professor Tyndall found that many of the infusions which had previously been preserved from putrefaction with ease, were now found, when placed under the same conditions, to swarm with life. Still he refused to believe in 'spontaneous generation,' and preferred to consider that the production of life in his flasks was due to some fault in his experiments, and that the air of the Royal Institution was not so pure this year as it was last. Instead, therefore, of introducing his fluids by means of an open pipette, as he had previously done, he now made use of a 'separating funnel,' and by this means the fluids found their way into the flasks without exposure to the air. The result of these precautions was that no organisms appeared. The objection, however, that we have to find is, that no guarantee can be given that will enable us to ascertain whether the air is really free from particles of organic matter or not. Last year the air was considered to be pure because motionless; but this year, though motionless, it was found to be impure.

Professor Tyndall and his friends are so exceedingly confident in the power of the germs of the atmosphere, that they attribute to their influence every known case of putrefaction; and they do so because they believe that they have proved that whenever the air can be excluded from a putrescible fluid, putrefaction will not take place. But Dr Bastian has succeeded in producing life out of organic infusions from which the air has been excluded, and which have been previously raised by him to temperatures hitherto considered by scientific authority as fatal to life. Thus the question resolves itself into this: What is the exact point of heat which kills the germs of bacteria? At present we do not know, and we have therefore no right to make any supposition upon this point in favour of either of the two theories.

Since Dr Bastian's experiments were first made public, the holders of the Germ theory have gradually raised what we may call the thermal death-point of bacteria, in order to explain away the results of his experiments by the light of their own theory. If Dr Bastian's fluids did develop life,

they say, the germs must have entered into them by some means or other; and if he superheated these fluids, the fact of the germs surviving the process shews that they must be possessed of greater enduring power than we have given them credit for.

Curiously enough, Professor Tyndall declares that frequent applications of a low degree of heat, and applied at intervals, have a far greater 'sterilising effect' than a single application of a high temperature. For a given fluid may contain germs of all ages. If such a fluid be boiled for a considerable time, all the germs of recent formation will be killed; but those of a greater age will merely be softened, but still capable of reanimation. If, however, the fluid be heated for a short time only, the recent germs will be destroyed, while an older crop will be liberated. A second application of heat destroys this second crop, and brings a third into play. Further heat will awaken successive crops, until at length a point is reached when the toughest germ must yield. This is certainly a most ingenious explanation of the difficulty.

A very interesting contribution to this subject has lately been made by Dr Bastian and others; and we will now briefly describe the main results of their researches. It has long been known that slightly alkaline organic fluids are more difficult to sterilise than those which are slightly acid. Pasteur the French chemist says that animal water in its normally acid state becomes sterile at one hundred degrees centigrade; but that if the infusion is first rendered alkaline by the addition of potash, the application of a little more heat is necessary, in order to insure sterility. If we bear in mind the two theories, we shall see that these observations of Pasteur may be explained according to either of them. We may believe that the germs in the infusion are fortified against the destructive action of heat by liquor potassæ; or on the other hand, we may hold that the spontaneous generation of organisms is favoured by the presence of an alkali. Acting upon these data, Dr Bastian heated a similar fluid in its acid condition to the temperature of one hundred degrees; so that, according to Pasteur, it was now barren. He then added a quantity of potash sufficient to neutralise the acid, the addition of the alkali thus being made *after* instead of before the boiling; and he then allowed the fluid so treated to stand at a temperature of about one hundred and fifteen degrees Fahrenheit. In a short time swarms of bacteria appeared.

Dr Roberts, however, considers that this result was obtained because sufficient precaution had not been taken by Dr Bastian to prevent the entry of germs, which might have been introduced by the potash. Accordingly, he filled a small flask with an ounce of the acid infusion, and then sealed up his potash in a capillary tube. The potash was then heated in oil to two hundred and eighty degrees Fahrenheit, and kept for fifteen minutes. The tube of potash was now introduced into the flask containing the infusion, and the flask was boiled for five minutes, and sealed. The flask was now kept for some time in order to test its sterility. When this was ascertained, the flask was shaken, so that the little tube of potash inside was broken, and the potash was thus allowed to mingle with and neutralise the infusion. The flask was now maintained at a low temperature of one

hundred and fifteen degrees Fahrenheit, and it remained perfectly clear. And so Dr Roberts concludes that liquor potassæ has no power to excite the generation of organisms in a sterilised infusion. Professor Tyndall repeated these experiments with additional precautions, and obtained similar results.

The general conclusion which is drawn from various experiments by the advocates of the Germ theory is, that liquor potassæ has no inherent power to stimulate the production of bacteria, and that any apparent power of this kind which it may seem to possess is due to the presence of germs within it. These germs they consider are not destroyed until the potash has been raised to the temperature of one hundred degrees centigrade if solid, and to one hundred and ten degrees centigrade if liquid. Dr Bastian, who repeated his former experiments with every possible precaution, found no difference in his results. Moreover, he discovered that liquor potassæ, when added in proper quantities, is just as efficacious in stimulating the development of life after it has been heated to one hundred and ten degrees centigrade, as when it has been heated to only one hundred degrees. Pasteur will consequently have to raise the temperature which he considers sufficient to destroy the germs contained in a solution of strong liquor potassæ to a point still higher than one hundred and ten degrees.

But there is still another proof that liquor potassæ if previously heated to one hundred degrees does not induce fermentation in virtue of its germs, because if only one or two drops be added, the infusion will remain as barren as ever; while a few more drops will immediately start the process of fermentation. Now if the potash really induced fermentation because it brought germs along with it, two drops would be quite as efficacious as any other amount. Finally, Dr Bastian has shewn us that an excess of alkali prevents fermentation, and to this fact he attributes the failure of Pasteur to develop life when he employed solid potash. He had added too much of the alkali.

It is impossible to draw any definite conclusion from these as from the other experiments, until we know the precise temperature which is fatal to germinal life. Dr Bastian indeed thinks that he has been able to shew that bacteria and their germs cannot exist at higher temperatures than one hundred and forty degrees Fahrenheit; but his evidence here is not quite conclusive. He does not deny the existence of germs nor their probable influence in producing life; he merely says that his experiments furnish evidence to shew that in some cases organisms may spring into existence without the aid of a parent. The strong points of his case are, that as fast as his adversaries can suggest precautions to insure the destruction of germs, he has been able to shew life under the altered conditions; and that whenever the supposed death-point of bacteria has been raised on account of his experiments, he has succeeded in obtaining life after having submitted his flasks to the required temperatures.

How this most interesting controversy will end, we cannot foretell; but we hope that the further researches of our scientific men upon the subject will ultimately lead to the discovery of the truth. Meanwhile, we observe that Dr Richardson, at the late Sanitary Congress at Leamington, entirely dissented from the theory of germs being

the origin of disease, and characterised it as the wildest and most distant from the phenomena to be explained, ever conceived. As no one contests the fact that pure air is a very important factor in promoting health and averting the insidious approaches of disease, people keeping that in mind need not practically give themselves much concern about germs. See that you draw pure air into the lungs. That is an advice to which no theorist can take exception.

OCEAN-VOYAGES IN SMALL BOATS.

It is perhaps not generally known that adventurous persons occasionally cross the Atlantic from the American coast to England in small boats. The undertaking is dangerous, but is accomplished. Twenty-four years ago, when on board a Cunard steamer, our vessel passed an open sailing-boat containing two men on a voyage from America to Europe. They had no means for taking an observation, but trusted to fall in with large ships, from which they would get information as to where they were. On sighting them, our captain knew what they wanted, and hung out a black board on which were inscribed in chalk the latitude and longitude. This was satisfactory, and on they went on their perilous expedition. What came of them we know not. We were told that men who run risks of this kind, and who happen not to procure information as to their whereabouts, are apt to make strange mistakes in their voyage to England; such, for instance, as running on the coast of Spain instead of the British Islands—the whole thing a curious instance of reckless daring.

Small vessels, possibly better provided, have made runs which have attracted the admiring attention of nautical men, for the exceptional circumstances under which they occurred, but without reference to competition or bonns. In 1859 three Cornish fishermen, in a fishing-boat of small tonnage, sailed from Newlyn near Penzance to the Cape of Good Hope, and thence across the Indian Ocean to Melbourne, where they arrived 'all well.' We do not find the actual tonnage named. In 1866 a small yacht of twenty-five tons, hailing from Dublin, set out from Liverpool, and safely reached New South Wales after a run of a hundred and thirty days. The distance was set down at sixteen thousand miles. It was regarded, and justly regarded, as a bold adventure in 1874, when a schooner of only fifty-four tons safely brought over a cargo of deals from St Johns, New Brunswick, to Dublin, with but seven hands to manage the craft.

Boat-voyages, however, are evidently more remarkable than those of clippers, yachts, and schooners; on account of the extremely small dimensions of the craft which have ventured to brave the perils of the ocean, and of the paucity of hands to manage the sails and helm during a period measured by months—under privations of various kinds.

Eleven years ago the Americans gave an indication of spirit and pluck in the conception and fulfilment of a very bold enterprise. Mr Hudson, the owner of a small craft named the *Red White and Blue*, fitted it up for an ocean-trip to England. It was a life-boat, built of galvanised iron, only twenty-six feet in length, six feet in breadth of beam, and three feet deep from deck to hold.

Small as it was, the *Red White and Blue* carried what sailors call a very cloud of canvas; it had mainsail, spritsails, staysails, courses, topsails, royals, top-gallants, sternsails, trysails, three masts, bowsprit, booms, yards, gaffs, jib-boom, yard-tops, cross jack yards, spankers, and all the rest of it—an enormous amount of furniture, one would think, for so small a house. The boat was sharp at both ends, had water-tight compartments lengthwise and transverse, and safety-valves which would enable her to right herself in a few minutes if flooded. There was a tiny cockpit for the steersman near the mizzen-mast, in which he sat somewhat in the same position as Mr Macgregor in his *Rob Roy* canoe. The air-cylinders at each end of the boat and along the sides, customary in life-boats, assisted in maintaining the buoyancy and upright position. It is amusing to read of a mainmast only seven feet high and a bowsprit of two feet in length; but the juvenile ship was proportionate in all these matters, and bravely she looked, a plucky handsome little craft.

The crew of the *Red White and Blue* was as exceptional as the boat itself. The owner, Captain John M. Hudson, took the command; Mr Frank E. Fitch acted as mate; while in lieu of petty officers, able seamen, and ordinary seamen was a dog named 'Fanny.' On the 9th of July 1866 the pigmy ship took farewell of Sandy Hook, near New York, on a voyage of unknown duration and uncertain vicissitude. At midnight on the 18th the boat struck against something hard and solid, but fortunately without receiving much damage. They sailed on till the 5th of August, when they fell in with the brig *Princess Royal*, hailing from Yarmouth, and obtained a bottle of rum, two newspapers (very precious to the wayfarers), and a signal-lamp. Narrowly escaping a complete overturn on the 8th, they spoke with the barque *Wells Merryman*, from which they obtained two bottles of brandy. After another peril of capsizing, they at length sighted English land, the Bill of Portland, on the 14th. Beating up the Channel, the boat entered Margate Harbour on the 16th, after being thirty-seven days at sea. The little craft created no small astonishment at Margate. As there was no chronometer on board, the calculations of distance, direction, &c. had to be made by compass, line, and dead-reckoning. So little opportunity had there been of obtaining a fire, that the food (mostly preserved in air-tight tins) had to be eaten cold. The original store of a hundred and twenty gallons of water supplied their wants with this essential requisite. Poor Fanny the dog did not at all relish the voyage; constant exposure to the weather so weakened her that she died soon after reaching Margate. When the *Red White and Blue* was afterwards exhibited at the Crystal Palace, a little incredulity was expressed as to the reality of the voyage; but as the names of the vessels spoken with were given and the dates of meeting, there seems no reason to doubt the faithfulness of the narrative. The two navigators, however, did not return to America in the same way; they had 'had enough of it.'

A still bolder achievement, in so far as the number of the crew was concerned, was that of Alfred Johnson, who in June 1876 started from America in a small boat manned only by himself. Quitting the port of Gloucester, Massachusetts, on the 15th, he had fine weather for a time, but

then experienced some of the peril of Atlantic voyaging under exceptional circumstances. Fogs and head winds compelled him to put into Shake Harbour, where he had his compass corrected. Starting again on the 25th, he experienced tolerably fair weather until the 7th of July, when a heavy gale set in from the south-west. The combings of the hatchway were started, and the water, finding entrance, damaged some of his provisions. The gale subsiding, he was favoured with fine weather and fair wind until the 16th; and a strong breeze in the right direction coming on, he made good progress till the 2d of August. When about three hundred miles from the Irish coast, the wind increased to a hurricane; he hove to, but in unshipping his mast for this purpose, the boat got broadside on a large wave and was upset. Johnson clambered on the upturned bottom, where he remained for about twenty minutes. By dexterous management he succeeded in righting the boat, got in, and pumped it dry; everything, however, was wetted by the upset, and he lost his square-sail and kerosene lamp.

Wending his way as winds permitted, he reached within a hundred miles of the Irish coast by the 7th, spoke a ship, and obtained some bread and fresh water—both of which had become very scanty with him. On the following day he got soundings, but fog prevented him from seeing land. On the 10th he sighted Milford, near the south-west extremity of Wales. He landed at Abercastle in Pembrokeshire on the 11th, after being fifty-seven days at sea; starting again, he put into Holyhead, and finally arrived at Liverpool on the 21st. The little *Centennial*, which measured only twenty feet in length over all, had run about seventy miles a day on an average. Johnson maintained his general health excellently well, though suffering from want of sleep.

The little boat that has recently crossed the Atlantic differed from Johnson's in this among other particulars, that it had a crew of two persons, one of whom was a woman. Certainly this woman will have something to talk about for the rest of her life: seeing that we may safely assign to her a position such as her sex has never before occupied—that of having managed half the navigation of a little ocean-craft for some three thousand miles. The *New Bedford*, so designated after the town of the same name in Massachusetts (the state from which Johnson also hailed), is only twenty feet long, with a burden of a little over a ton and a half; built of cedar, and rigged as (in sailor-phrases) a 'leg-of-mutton schooner'; with two masts and one anchor. Anything less ocean-like we can hardly conceive. Captain Thomas Crapo, the owner of this little affair, is an active man in the prime of life; and his better-half proves herself worthy to be the helpmate of such a man. On the 28th of May in the present year, Captain and Mrs Crapo embarked in their tiny ocean-boat, provided with such provisions and stores as they could stow away under the deck. The steersman (or steerswoman) sat in a sunken recess near the stern, with head and bust above the level of the deck; the other took any standing-place that he could get for managing the sails, rope, anchor, &c. The boat had no chronometer; and the progress had to be measured as best it could by dead-reckoning.

The boat, soon after leaving New Bedford, was forced by stress of weather to seek a few days'

shelter at Chatham, a small port in the same state. Hoisting sail again on the 2d of June, the boat set off with a fair wind; and all went well for three days. An adverse wind then sprang up, a fog overspread the sky, and for ten days the voyage continued under these unfavourable circumstances. Whilst near the shoal known as the Great Banks, a keg was seen floating; this was secured, and the iron hoops utilised (with the aid of canvas) in making a drogue—one which was included among the outfit of the boat being found too light for its purpose. The boat, after lying to for three or four days in a gale of wind, started again, and sailed on till the 21st of June, when another gale necessitated another stoppage. The *New Bedford* sighted the steamer *Batavia*, which offered to take the lonely pair of navigators on board: an offer kindly appreciated, but courteously declined. After this meeting, a succession of gales was encountered, and the rudder broke; a spare oar was made to act as a substitute. The sea ran so very high that even when lying down to rest, husband and wife had to lie on wet clothes, everything on board being sloppy and half saturated. At one portion of this trying period Captain Crapo had to steer for seventy hours uninterruptedly, his wife being incapacitated from rendering the aid which was her wont; and on another occasion he had to pay eighteen hours' close attention to the drogue. The voyage terminated on the 21st of July, after a duration of fifty-four days. The average sleep of the captain did not exceed four hours a day; and he had no sleep at all during the last seventy hours of the run. He had intended to make Falmouth his port of arrival, but was glad to make for Penzance instead.

The surname of Crapo, we were informed by the captain, is not uncommon at New Bedford. The goodwife is Swedish by descent, Scotch by birth, American by marriage—a citizen of the world. In examining the boat closely (which we have done), it becomes more than ever a marvel how it could have formed the home of a married couple for seven weeks. Descending through a small hatchway, the feet rest on the floor of (let us say) the state-cabin, an apartment three feet high; consequently the head and body project above the hatchway. By spreading blankets and rugs, and crouching down by degrees, a would-be sleeper can lie down under the deck, or two sleepers close to the two sides of the boat. The wife of course acted as stewardess, cook, parlour-maid, scullery-maid, &c., leaving her husband to manage most of the navigation. The sperm-oil lamp for the compass-binnacle; the kerosene or petroleum lamp for the cooking-stove; the receptacles for biscuit and preserved meats and vegetables; the butler's pantry for a few bottles of spirits; the vessels for containing water—all were packed into a marvellously small space. The drogue (already mentioned) is a kind of floating anchor which, dragged after the vessel by means of a long rope, helps to steady it in certain states of the wind. Five hundred pounds weight of stores and six hundred of iron ballast, kept the boat sufficiently low in the water.

Such were the interior arrangements of one of those strange small vessels which adventurously attempt to cross the Atlantic.

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EXPERIENCES OF A KNOCKER-UP.

SOME time ago, while paying a professional visit at the house of a small tradesman in the town of B—, in the north of England, I made the acquaintance of an interesting old woman, who upon the occasion in question was nursing the tradesman's wife. There are persons, especially of the gentler sex, who will not be said Nay in their attempts to win your confidence; and such was Mrs Waters, the old lady whom I have named. We became intimate in a few minutes; and circumstances causing me to prolong my visit for several hours, I left the house as familiar with the dame's history as if I had known her for many years.

I have styled her an interesting woman. So she was. Her appearance, I grant, was not attractive. She bore no trace of beauty; neither had she refinement either of speech or manner, being somewhat brusque and hasty both in word and action; yet there was an irresistible power in the rapid glance of her large bright eyes; and although at first you might be led to believe, from the hastiness which marked all her movements as she attended to the requirements of the house and family, that she must be harsh and unfeeling in her disposition, she was really one of the kindest and most tender-hearted of women. I soon found out that she was a neighbour, and that she possessed independent means, which she had acquired by her own unaided industry; that she had also maintained an invalid husband for years, and had educated and given a profession to her only son and child.

I resolved to become better acquainted with the old dame; and as I did not scruple to put questions, I gleaned from her what shall form the subject of the present paper. Her designation as a 'knocker-up' will become plain as I proceed. In reply to an inquiry she said: 'O dear, no! I am not unwilling to tell you how I made my independency. Why should I be? An honest woman need not be afraid of anything. I made it, sir, by knocking-up; every

penny of it. Ay, you may well look surprised, for I fancy you don't know what knocking-up is; or if you do, you are wondering how I could save a fortune out of such a line of action. No; I don't mean to say that I had no other way of making money. I started a shop after I began to knock up; but every penny I made by shop-keeping was spent in keeping my family; and when my son was put to business, some of my otherwise-made money went along with it; but every penny which I put by, and the income on which I now live, was got by knocking-up.

'You may well ask how I, a woman, should ever have thought of such a means of living, or should have ventured upon it. Well, to tell the truth, I never thought of it; that is, I did not invent it; it was brought before me; and I was in too great need to be very nice. I believe I was near the first, if not the very first who earned money by regularly knocking up; at anyrate I knew of none who were in that line. The thing was brought about in this way. My husband was a delicate man from our first acquaintance. And he was, bless you! as different from me in spirit and ways as a summer day is from a winter day. He had hardly a morsel of *fend* in him. I've often wondered what we should have done, or what would have become of us, had it been I that had been laid up instead of him. But you see, sir, Providence had a hand in the matter. It was well in many ways, I may say in all ways, that he was afflicted; for you see had it been *me*, what an ill-tempered impatient creature I should have been.

'Was it an illness that fell upon him which laid him aside, do you ask? No; not exactly; I'll tell you. We had been married about six years, and our son was about four years old, when Waters happened on a misfortune; he was in the act of lifting a heavy weight in the foundry in which he worked, when something snapped or gave way in his back. He was brought home between two men; and from that day until his death, more than fifteen years afterwards, he never did a stroke of work. Poor fellow!

'Yes; you're right; the knocking-up scheme followed. It was very singular. I had been down to the foundry one Friday evening for the bit of pay which the masters kindly allowed him for a while, when I got into conversation with one of the better sort of men who were employed in the works. I said to him that I believed I should have the home to keep over our heads, and that I was willing to do anything that would help therein, when he said quite suddenly like: "If you will knock me up at three o'clock every morning but Sunday, I will give you half-a-crown a week." At first I thought he was joking; but when I saw that he was sincere, I closed in with the offer; for something said within me that that would be the beginning of something better still.

'The reason why knocking-up is so widespread nowadays is this: people soon get so used to the alarm-clock that it fails to awake them, or if it awake them, they are at times so sleepy that they drop off again before the alarm runs out. This was the case with the person who asked me to awaken him; he had lost many mornings through over-sleeping the time. He was in the designing line; and he said he got more work done and of a better sort during the quiet hours of morning than at any other time. At anyrate this was his statement, though afterwards another reason was assigned for his habit; so he was anxious to be up at three o'clock. Well, I engaged with him; and a good thing it was for me, for before a year had gone over my head I had thirty customers of the like kind. No; not for the same hour in the morning, nor for the like pay—begging your pardon—but mostly for the time between five and six o'clock.

'I have no objection whatever to tell you what I used to earn; why should I? But let me tell you first how I went on adding to my business, if I may call it a business. At the end of the first year, as I have said, I had thirty customers. Year by year they went on increasing, until at the end of five years I had near eighty houses to go to; and for the thirty years that I followed knocking-up after that—thirty-five in all—I never fell below that number. Sometimes I had as many as ninety-five. What did they pay? All prices. When I got a few more early customers in addition to my first one, I knocked him a shilling a week off; for I could not fashion to take half-a-crown. So all who were knocked up before four o'clock paid me eightpence a week; those who had to be awakened soon after four gave me a shilling a week; whilst those who had to be aroused from five to six o'clock paid from sixpence to threepence weekly, according to time and distance. Of course the greater number of customers belonged to the threepenny class.

'You can't see how I managed to get through so large a number of houses in so short a time? But I did, at anyrate. I found system to be a needed thing, you may be sure. Then I found out near outs to different neighbourhoods. And I took care not to let the grass grow under my feet. Besides, I fancy I had a knack of rousing my employers in a short time. Perhaps my knock or ring or way of tapping was more effective than that of other knockers-up. However that may be, I got through my engagements morning by morning. I see you are eager to get at my weekly earnings. Well, I'll keep you no longer in suspense. For

thirty years I never earned less than thirty shillings a week; mostly thirty-five; and when I had a good lot of far-away or very early customers, I picked up as high as forty shillings in a week. You stare; but what I say is true. Two pounds a week for summoning folks to their work, of a morning.

'I am not a very strong or healthy body now; how can a woman of seventy years expect to be without ache or pain after a life like mine? But for thirty-five years wherein I followed the knocking-up line I never had what may be called a badly day. Bless you, sir, I hadn't time to be laid up! I believe my early rising, and the exercise in the open air, kept me in health; and when bits of cold got hold of me, why, my spirits did much towards helping them off again. Spirit, sir, is everything! Did I go to bed during the day? Never! I could not afford the time; for I had my shop to mind. You look surprised; but I told you at the beginning that I kept a shop. See you; I did not know how long my husband might linger; and then I was so wrapped up in my poor lad, that I determined he should be a doctor or a lawyer, or something smarter than a tradesman; so, having a good long day before me, I resolved upon opening a shop of some kind.

'I was a time in deciding on what I should deal in. I dreaded giving credit; and as there are some things which women are not in the habit of buying on *tick*—somehow they never think of that when they really want them—I resolved to deal in them. So I hit upon selling black-lead, blacking, brushes of various kinds, even pots and pans; for I noticed that when a woman sent for such things she sent the money for them. Besides, I saw that a matter of ten pounds or so would start me in that line; I saw that there would be little perishable stock or articles that would go out of fashion; nor would the business call for a deal of learning or knowledge to manage it—things which I had not; so into that line I went.

'At first I managed to make my cottage do for my shop; the bedroom and cellar I made into the warehouse; then as the trade increased I took the house next to the one I had, and made it into shop and warehouse. Rent and taxes, you know, were not heavy items. I began this business after I had done knocking-up about five years, and ended it about six years ago.

'No; I did not give up because I was tired of work. But I saw that I had enough to live upon, and (here her voice fell into a low key, and assumed a plaintive tone) 'I had no one belonging me to live for; for my husband had been long dead, and my poor son had been taken from me. Did I sell my business? No; I did not sell either business. There was a poor man, a neighbour, who fell out of work; and as he had a large family, and was running from bad to worse at his shop every week, I just handed over the knocking-up to him; and a good thing it has been for him, you may be sure. And as for the other concern, why, I just let my customers spread themselves among other shops as they thought fit.

'Did I make many bad debts in the knocking-up business? Not many; less than you would suppose. But for one thing, I looked pretty sharp after my money. It took some gathering in,

though. I got paid mostly on a Saturday afternoon and night. Some called and paid me as they passed my house; others left it with those appointed by me to receive it. One way or other, I got most of it week by week. To those who began to be dilatory in paying me, I just gave a hint that if they did not pay up that week-end I would let them overlie themselves a morning now and again. This put them into fear; for they knew they would lose a deal more by being 'quartered' once at the mill than they had to pay me for a whole week's knocking-up. So I had few who did not pay up old scores. Of course I leave out of account some I did not care to press for payment—men with large families, or men who had had a fit of sickness or the like, or a poor delicate woman. But let that pass; they might have done the same by me.

'Yes; a knocker-up has a good chance of finding out the tempers of his customers. Bless you! I soon got to know who were surly and who were pleasant folks; who were short-tempered and who had long tempers. You know, when knocking-up began to be a regular trade we used to rap or ring at the doors of our customers. But there were two objections to this way of rousing them: one from the public, the other from the knocker-up. The public complained of being disturbed, especially if sickness was in a house, by our loud rapping or ringing; and the knocker-up soon found out that while he knocked up one who paid him, he knocked up several on each side who did not pay; so we were not long in inventing the fishing-rod-like wands which are now used. Ay indeed, the knocker-up has a wand of office. I was among the first who adopted rods. So now a few taps on the bedroom window, which no one hears but those who should, are sufficient.

'A surly or short-tempered fellow would growl or knock things about as he came to the window to reply, and his responding rap would sound as peevish as possible; but a good-tempered man, ah! it used to be quite pleasant and cheering to get him out of bed; for you could hear from his very tread that he was grateful even, and his reply-tap sounded quite musical; and when he spoke and bade you good-morning, it was really encouraging. I have been inclined at times to knock some men up for nothing, just because it was pleasant to hear them, especially after you had had two or three of the other kind to deal with. I have given over knocking some fellows up for no other reason than that they were sulky or angry at being disturbed. There was one man in particular: he was a little, slender, ill-featured man, who always reminded me of a weasel; he had to be up at five o'clock; he was given to drink, by the way; so that he was not only hard to awaken, but he never came to the window but he indulged in angry mutterings, and I heard at times an oath slip out of his mouth. He was a shilling-a-week customer, and paid regularly; but I was so plagued by his temper and insulting ways, that at last I gave him up as a bad job.

'You are right, sir; a knocker-up really deserves the gratitude of his customers. They should not think he is compensated when he gets their money. Only think: he has to be out of his warm bed in all weathers; and must not let a bit of tic or tooth-warth keep him at home. But they can sleep on the night through, in peace and content,

because they are sure to hear his taps on their window at the right time. Really, I'm sure nobody can think a knocker-up is a selfish man, or for that part of it, a selfish woman. Why, no money is so well spent as that which is paid to the profession; and I believe most who pay it think so.

'I knocked up for years two young women who were sisters. They had been left orphans when very young; but poor things, they stuck together, went to the mill, saved their earnings, and at last took and furnished a room. They got me to knock them up; for you see they kept their own little spot clean and tidy, and mended their own things at night; and they went to bed tired and often late; so they slept heavy. Well, as I've said, I knocked them up for years. They would not let me do it for nothing; no, not even now and again. One or the other had always a "Good-morning," or "How are you this morning, Mrs Waters?" in a low kind tone for me. And about once a quarter they would have me spend a Sunday evening with them and take a cup of tea; and if any folks were grateful it was these girls.

'When did I get my sleep, do you ask? I'll tell you. I always went to bed at nine o'clock every night, except Saturday night; and having a tired body and a contented mind, I was not long in dropping asleep. And I was up again at half-past two to the minute; for my first customer lived a good twenty minutes' walk from my house, and you know he had to be awakened at three o'clock. Well, for some time I had no one else to arouse until four o'clock, so I generally came home. Before I went out in winter I got a cup of tea, so I kept the fire in; but in summer I let it go out, and did not care to light it again until I came back from the early customer. Then I always made my poor husband a cup of tea, after which he slept better than in the fore-part of the night. You see he had to awaken me; for being young and very active during the day, I slept soundly. But what between him and the alarm, I never over-slept myself; no, not even once. But after I had been about six or seven years at the job, I got to awaken quite naturally like. It was well I did; for when my husband died, I had no longer him to depend on.

'Yes; the worst weather for a knocker-up is wet weather. Oh, it was trying to one's patience, to say nothing of one's health, to be pelted with rain and wind. Then when the streets were filled with snow-broth it was anything but pleasant. But I always tried to think of the good I was doing. What a wonderful help it was to think that way! Why, I found out that even a chimney-sweep or a sweeper of our streets would be happy in his calling if he only took such a view of his work, instead of comparing it with such as a clergyman's. Why, sir, we are all helping one another as well as earning our livings when we follow our lawful callings. But it was extra nice on a fine spring or summer morning; I used to be happy all over on such mornings.

'You would like me to say something about my son. To tell the truth, sir, I seldom feel willing to talk about him; for when I've been led out to talk about him, my dear lad, it has taken many a day to get his image out of my mind.'

I here besought Mrs Waters not to go on with the story, but she did. It was interesting and touching

in some of its details; but as it would not be relevant to the leading subject of this paper, I refrain from relating it. I heard her tell, both then and afterwards, several incidents of great interest; but as my paper is quite long enough already, I must omit them.

Note.—Since the writer of the above article had his conversations with Mrs Waters, he had a long talk with a civil but illiterate man whom he fell in with during a journey by rail. It came out that he got his living chiefly by knocking-up, having over eighty regular customers, from whom he obtained on an average twenty-eight shillings a week. This was in a town six miles from the scene of Mrs Waters' toils. But like most other money-making vocations, this one has become over-run with competitors, as is evident from the fact that the writer meets in his short early morning walk into the town at least half a dozen knockers-up of both sexes; so that few are now, he believes, so fortunate as either the man above named, or Mrs Waters.

THE ADMIRAL'S SECOND WIFE.

CHAPTER XIV.—THROUGH THE GRIM GATES.

FIVE wretched days pass, and Katie hardly knows how they go, for she counts time only by the arrival of the mail-bag. Yet no letter has come from Sir Herbert, and she is almost distracted. Has he really set her free? cast her off? And will he never again come, or send, or speak?

The great house is growing silent and gloomy beyond measure. Though the daily routine of work and attendance goes on as usual, there is a change, and Katie sees it. Servants are beginning to talk; a rumour spreads among them that the Admiral is to be superseded, and that the establishment in Government House will soon be broken up. Perhaps they have gleaned this from the newspapers, which are making very free with Sir Herbert's name just now. They jest at his clumsiness, his mismanagement, and his blunder; they wonder whether he has fallen into dotage. They marvel how a man in his sober senses could send such a miserable craft as the *Leoni* to sea in a storm. Indeed she would have become a total wreck had not the *Leo* while making for the Short Reefs discovered her far out of her course, tossing about on a cross sea, her rudder broken, her decks flooded with water, and her crew in a rampant state of disorder. The old ship was fast going to her doom, like a great blundering unmanageable sea-monster; when the *Leo* took her in tow and brought her into harbour.

On the evening of this fifth day, Katie watches till the last post comes in, till the last train has stopped, and there is no longer any chance of hearing from or seeing her husband that night. Then her powers of endurance fail; waiting becomes agony, her punishment seems greater than she can bear. The silence is killing her; she feels as if she must go mad, or die. Her brain throbs so wildly, her mind is in such tumult, that she is hardly responsible for her actions. She rushes up to her room, puts on an outdoor dress, and with her veil

closely drawn over her face, is only conscious she must flee from the house. It is so quiet, so lonely; the very atmosphere suffocates her.

'I will go home to my mother; she will pity me, and calm my burning brow with her cool soft hand,' is her thought, as she almost runs across the hall and out of the door. She never notices the night is cold, that long white icicles are hanging from the trees, and that the ground is hard and frozen. She sees not the stars glittering down at her with their clear holy eyes; nor does she observe the grave questioning looks of the sentries as they notice the Admiral's wife flee out of the gates alone at that late hour.

A strange contrast that silent stealthy departure, to Kate's triumphant entry through those very gates not twelve months ago. Her reign in Government House has been short, its termination sudden and inglorious, for she is doomed never to enter the stately portals again. She walks rapidly on through the streets, shivering, but not from the keen air, for her whole frame is in a burning fever, and the chill breeze feels like a blast from a blazing furnace. Soon Katie is standing on the threshold of the well-known room in the old house, soaring all the inmates with her wan face and wild looks. Mrs Grey is at her side in a moment.

'Katie, my child, what's the matter? Are you ill?'

'Mother, mother! I have come home to you again. Don't send me away, I entreat you. Herbert has left me, deserted me!'

In another moment she is on a stool at her mother's feet, with her face buried in her lap, sobbing a wild resistless storm of tears. Mr Grey, with his spectacles raised on his forehead, looks down on his child curiously. He would begin questioning her at once, but his wife cautions him to silence till the burst of tears abates and the sobs become fewer.

'Katie, what's all this about?'

'Herbert is gone! I shall never see him again!'

'Surely nothing has happened to the Admiral? Be calm, child, and tell me what all this means.'

'He went to London, father.'

'I know. He wrote to me on his arrival there.'

'But he went away in anger; parted from me never to return.'

'Katie, I can't understand you. Compose yourself, and explain.'

Lady Dillworth recognises the voice of authority so potent in the old days, and yields to it by passively producing the Admiral's letter. Her father's brow clouds as he reads it over, and there is stinging contempt in his voice as he exclaims: 'So, my Lady Dillworth, you have been flirting with Walter Reeves again!'

Kate is on her feet in an instant, and confronts him with eyes that flash through her tears.

'I have done nothing of the sort, father; that is all a mistake. What do you take me for? I am Sir Herbert's wife, remember.'

'Then how am I to understand this letter?'

Katie explains. She does not attempt to shield herself, nor hide any single particular; and her father softens when he finds she has been more thoughtless than intentionally culpable. Still he speaks out his mind, and says with a husky voice that trembles with emotion: 'A short time ago I

gave my daughter to a brave good man, whose only fault was over-indulgence; and before the end of one short year, I find she has grieved him with her folly, injured him with her thoughtlessness, and finally driven him from his home.—Now, don't interrupt me, Katie. Have you ever read of the foolish woman that "plucketh down her house with her hands?" You have done that."

The room is silent, except for Helen's sobs. Katie stands like one frozen to marble while her father heaps reproaches on her head. She feels she has given cause for them, and raising her hands with passionate eagerness, exclaims: "Help me, help me, father! Tell me what I can do. I would give my very life to set things right again."

Mr Grey shakes his head gravely. "Such things are not so easily mended, Katie. The first step will be for you to return home and wait there till your husband comes."

But here Mrs Grey interposes. With a mother's keen discernment, she sees Katie is on the very verge of distraction; a more prolonged pressure, and the brain must give way. She pleads for her daughter.

"Let Katie stay here to-night, dear. She needs rest and nursing; and there are none but servants in that great lonely house."

"And a pretty scandal those same servants will give forth, when they tell all over Seabright to-morrow how their mistress ran away from her home."

"Go to them, dear. You can stop their tongues. I tremble for Katie if she returns to-night," whispers Mrs Grey hurriedly in her husband's ear; and her persuasion prevails.

Mr Grey arrives at Government House just in time. He finds the whole place in confusion, every one looking impatiently for the mistress, and wondering where she can have gone so late. Hunter is more alarmed than any of the others, though he tries to assure them there is nothing wrong. He has seen through some of the late household events, and knows that Lady Dillworth, with her pale face and restless eyes, has been on the verge of despair for a long time past. So he feels a sense of relief when Mr Grey comes in, with a voice of authority that scatters suspicion to the winds.

"Lady Dillworth is at my house, and her mother has prevailed on her to stay there to-night. Hunter, you can bring over the mail-bag in the morning; and tell Hannah to pack up a few things for her Ladyship's use, in time for her to dress to-morrow." So the servants are pacified; and Seabright is cheated of its scandal.

No more reproaches fall on Katie after her father's departure. Though they cannot banish her sorrow, Helen and her mother soothe her despair with the touch of loving hands, the sound of sympathising voices. There is rest and relief in their affection, and Katie grows calm, despite her self-reproach.

By-and-by Mrs Grey leads her up to the little bedroom that was hers before her marriage, and ere long she is nestling among the snowy pillows, weeping and praying for her husband—and herself.

CHAPTER XV.—NEWS AT LAST.

Katie may have slept, for towards morning she dreams she is out on the Short Reefs, and sees the

Daring go down with her husband, father, and all her household on board. They glare at her with accusing eyes, and call her "Fiend, murderer!" So it is a relief to start up and find it was all a dream. In the dim gray light she sees a figure all in white by her bedside, and is ready to shriek with fright, till she discovers it is only her mother in her white dressing-gown, with a lambs-wool shawl over her shoulders. Mrs Grey has been watching, in and out of the room nearly all night, and now she bends over and kisses her daughter. "I have good news for you, Katie."

"O mother, what is it? Has Sir Herbert come back?"

"Not yet, dear. The news is, that the poor sailors supposed to have been lost in the *Daring's* cutter are not drowned after all. An outward-bound vessel picked them up and took them on to Havre. They returned here safe and well this morning, so there has not been a single life lost."

"Thank God for that!" exclaims Katie reverently, with clasped hands; and never was ejaculation more heartfelt.

"Yes, He is very merciful; we must trust Him more, Katie."

"Mother, I have even doubted His mercy sometimes! In my misery, I thought even *He* had turned against me; but those wretched feelings are past now, and if Herbert would come back, even happiness might return to us again."

There are many letters in the mail-bag that morning, but Lady Dillworth lays them all aside—only one interests her, and that bears the Hayes Hill post-mark. "This is from Laura Best; perhaps there is news of Herbert in it." Katie opens the envelope with trembling hands, glances at the contents, and exclaims: "Herbert is ill—lying ill at Laura's, and she has written to summon me down there."

The particulars are soon made known. The Admiral went to Hayes Hill on his return journey from London, and as soon as he arrived there, was stricken down with sudden illness. He had shewn no sign of recovery up to the present, and Laura's letter was most urgent.

"I must go to Herbert at once. Oh, why did he go *there* in his time of sickness and danger? When he felt the attack coming on, why didn't he come back to me?"

"Ah, why indeed?" echoes Mr Grey gravely, as he folds up his papers and locks his desk.

Soon all is bustle and preparation. Mr Grey hurries everybody half out of their wits in his anxiety to be in time for the next train to Hayes Hill. He has decided on going down there with Katie, and says he will not leave her till he sees her once more under the same roof with her husband. Lady Dillworth's boxes are sent to the station direct from Government House; and she and her father are soon speeding on their way as rapidly as the swift locomotive can take them. It is a cold misty day, and Katie glances out on the dreary country with a listless eye and a heart as dreary as the scene. She fears that after all she may be too late to see her husband alive; and even if he is living, she wonders whether he will forgive her, or again turn from her with that sorrowful look of reproach.

At last they reach their destination, and are soon driving up the lane to Hayes Hill in Laura's brougham. Though the twilight is fast gathering,

Katie sees the house is a long low one, built of red brick, and in bungalow fashion. Robert Best had it erected in that form as a souvenir of his early days in India. With a show of eastern exterior, it yet contains every possible comfort and luxury our colder climate needs. It is a residence that bears more sign of convenience than style.

The entrance-hall is large, and brightly lighted up, and Katie feels dizzy as her father leads her in from the cold outer air. A silence as of death reigns in the house—even the slim youth who opens the door speaks in a subdued whisper. Perhaps it is all over!

'O Herbert, my darling!' repeats Katie to herself, and her heart gives a wild throb, and then seems to grow still and cold. She cannot frame the question she longs to ask; but Mr Grey inquires at once.

'How is the Admiral now?'

'Much the same, sir. Two doctors are with him at present.'

The page throws open the door of a room on one side of the hall. Laura's sitting-room evidently, for her work is lying on the table, also her desk, on which is a half-written letter. Presently, a light step is heard, and Mrs Best comes running in with outstretched hands. There is no question of jealousy or restraint now. Laura clasps her father's wife in her arms and kisses her tenderly.

'Oh, I am glad you are come! I feared you would be too late.'

'Is he dying? Is my husband—dying?' Katie inquires with a sob.

'He is very ill. But you must be calm, and help me to nurse him. He has been repeating your name so often!'

'Has he really asked for me? Oh, I am so thankful!'

'Perhaps not *asking* exactly, for his mind is unsettled. At one time he mentions your name with the tenderest epithets; at another he talks of you in a strange wild way, very painful to hear.'

'I wonder whether he will know me?'

'We will see when the doctors have finished their consultation.'

Ere long, poor Katie, leaning on Laura's arm, enters Sir Herbert's room, and there she once more sees her husband's face.

What a change one short week has made! There is nothing but a flushed fevered countenance, restless wandering eyes, parched lips, and throbbing brow, for her to gaze on. She might have been the veriest stranger for all the recognition she gets.

Laura whispers softly: 'Don't be startled, dear. He is not conscious now; but when he wakes up to reason again, he will be so glad to have you near him.'

But many days pass before that. It is a case of long nursing, of long nights of watching, and weary hours of doubt and anxiety. Through it all, Mrs Best is so earnest, so tender-hearted, so unselfish, that Lady Dillworth finds herself wondering over and over again how she ever could have disliked her so much in the old days gone by. All her petty airs, her studied affectations have vanished: she looks a pale anxious woman, with traces of weariness and weariness in her face. Her dress is commonplace—plain—a deep gray in colour, and of some soft senseless material, whose folds do not rustle or creak as she moves about the sick-room.

Her voice is low and gentle, her words wise and hopeful, and the poor heart-broken wife clings to her for help and sympathy—and not in vain. Days pass on. Mr Grey returns home to wind up his affairs, for his secretaryship expires with the Admiral's resignation; but he promises to return to Hayes Hill again, on the shortest notice, if needed. Wife and daughter take turns of watching beside Sir Herbert, sharing each other's anxieties and hopes.

The best hours of Katie's life now are those she spends by the Admiral's side in that still room. She seats herself in the arm-chair, places the lamp so that its rays may fall faintly on her husband's face, and then watches the familiar features, the high forehead, and wonders whether those lips will ever again talk to her of love and speak forgiveness. She would fain fling herself on his breast and press her lips on his, fevered as they are; but she dares not till he himself shall have called her to him again. And so she sits there musing, hoping, praying. Come what will, Lady Dillworth will never again be the vain, selfish, frivolous, thoughtless woman she once was. Laura's society is working her good; there is a softness and sweetness in her manner never before visible.

One bright afternoon in spring, Lady Dillworth has taken up her position by the bedside. She can watch the invalid, and with a turn of her head can glance at Laura and her boys, who are in the grounds outside the window. The scene out there is calm and pleasant. A sloping lawn extends almost down to the river, on which some water-fowl are lazily floating. Beyond the river rises a grove of trees, now fast unfolding their tender green buds and drooping tassels. Laura's boys are bright, golden-haired, blue-eyed little fellows, lively as butterflies, and just as restless. They flit in and out the shrubbery, gathering violets for Lady Dillworth. Presently they bring her a bunch, and she stands at the bedside with them in her hand. But what is this that arrests her? A change has come over her husband's face, so remarkable that she holds her breath with sudden awe. Is it the portent of death?—the settling of the features into the calm repose that proclaims life's warfare over?

The haggard anxious expression has quite vanished; he seems to sleep quietly as a child. A soft glow steals over his cheeks, then his eyes open, and he looks up with that smile she knows so well.

'Katie, my wife! are you here? I have had a frightful dream.'

'The dream is over now, Herbert.'

'Then it is not true that you are weary of me and longing for freedom?'

'No, Herbert. I have not grown weary. Never were you as precious as you are now! Darling! darling! say you forgive me, and love me still.' Her eyes are full of tears, and she sinks down beside him.

'What was it about Walter Reeves? He has been troubling my thoughts and driving me mad,' Sir Herbert repeats musingly.

'Walter Reeves is not in England now; he is gone to Italy with his wife. Liddy Delmere and he were married a fortnight ago.'

'Come nearer, my pet; come nearer me, Katie, my wife! Let me feel your kiss on my lips once more. Oh, I have been nearly heart-broken, nearly dead; but hope is returning. The strong

arm of Meroy has brought me back to life again; and I feel as if there is happiness in store for us still!

Laura Best comes in ere long, and finds Katie still kneeling beside the bed, her hands clasped in her husband's, and the light of fond affection glowing from her eyes as she looks tenderly into his. The bed is bestrewn with early violets, for Katie has flung down her flowers in her agitation, and the perfume is filling the room like a soft breath from the garden. Laura is not one whit calmer than Katie; she kisses her father, and weeps tears of joy, and feels he is given back to them from the very grasp of death. Marvellous to relate, all this flutter and excitement does not injure Sir Herbert or throw him back. Life has returned to him in too full strength for that. The delight of reunion, the joy of returned confidence in Katie, is like a draught of some invigorating potion to his heart, and from that hour he speedily recovers. All his doubts and distrust are over; all Katie's frivolity and worldliness have fled. They begin a new and more complete life together. True, the rest of the Admiral's days are doomed to be spent in retirement; as years pass by, he sees younger men stepping into the post he should have occupied, and gaining honours he once hoped to win.

True, he misses the full deep draught of power, the very taste of which had been sweet to him. Katie too has lost the brilliant colouring that once lit up her path; but neither of them repines at the change. Though Admiral Sir Herbert Dillworth's flag no longer flutters at the mast-head, and though his wife no longer leads the fashions, they are happy, with a higher, purer happiness than they ever knew in the days they spent at Government House.

THE END.

THE MAFIA AND CAMORRA.

THESE are two Italian words of evil import. They signify confederacies of villains of all ranks in society who live by exacting black-mail on traders. Our occasional observations on the proceedings of these illegal associations, as also on the system of brigandage in Sicily, have been somewhat trying to certain Italian journalists. They do not absolutely deny the existence of these social disorders, but speak of them as insignificant, and are shocked that they should be made a matter of comment among strangers. We are willing to believe that our remarks, like those of others, drawn from authoritative reports, have done some good, and certainly no harm. The comments of the English press may have a salutary effect in curing evils which the native press of Italy fears almost to touch upon. Vast numbers of English travel in Italy—some of them residing for a season on the score of health—and all stand in need of protection from petty extortions and robbery. If the Italian government be unable to give the degree of security which is claimed by peaceable foreigners, it is at least desirable that the English who venture abroad should be made aware of the vexatious exactions and impediments which probably await them. In our last notice on this subject, we stated pretty plainly that the ordinary course of justice in Italy, and more specially in Sicily, was seemingly unable to quell the disorders

here referred to, and that nothing short of prompt military execution would avail. For what signifies the paitry process of capturing and imprisoning a few disturbers of the peace, and then shortly setting them free, to carry on their robberies and murders as usual? If the southern provinces of Italy are to cease to be a disgrace to civilisation, the true remedy must consist in the ready appeal to a court-martial, speedily followed by execution.

As if at length stung by the remonstrances of English newspaper writers, the government of Italy have latterly shewn increased vigour in the attempt to extirpate brigandage in Sicily, with, we are told, good results; and now they are to all appearances resolved on striking a blow at the Camorra in Naples. We are made acquainted with the fact by *The Times*; and should any English journal specially deserve praise for its denunciations of the scandalous manner in which travellers in Italy are liable to be annoyed by the misconduct of officials, it is that paper, which through its correspondents is able to offer instructive accounts regarding the illegal and hitherto almost unchecked Italian associations. Its Naples correspondent, under date September 4, writes as follows; it being only necessary to premise for inexperienced readers, that while *Camorra* is the name of the association, *Camorrista* signifies a member who participates in its gains—plural *Camorristi*:

The resolute attempt which is at last being made to destroy that odious criminal association known as the Camorra is the all-absorbing interest of the Southerners. Its long existence and its vast number of crimes are matters of history. Thriving under despotic governments, and later still under political complications, it has recently raised its head again, and has brought down upon it all the strength of the police. *Raccia* after *raccia* has been made on the body, and during the last sixteen or seventeen years, hundreds, perhaps thousands, have been seized and sent off to the islands, only to return and renew their operations; but one day this week a blow was struck which reflects great credit on the energy and courage of the Quistor. The Camorra is a noxious weed which is to be found everywhere and among all classes of society; but it flourishes especially in the markets, where its agents tax every article of food, arrange the prices, and then leave with their pockets full of their ill-gotten profits. On one of these markets, therefore, an attack was made on Thursday morning. The ground had been well examined before, and twenty or thirty guards in plain clothes were sent early to mingle in a crowd of about two thousand persons, and watch the mode of conducting business. First comes in a peasant or *cafoni*, as the *Pungolo*, adopting the common term, calls him. He is laden with the produce of his land—fruit and vegetables—and the Camorrista presents himself and demands his tax of deposit. It is paid without dispute, as it has been for time out of mind. The *cafoni* of course wishes to sell his goods, but is unable to do so until the Camorrista settles the price and takes his part, which is given without dispute. The purchaser, the man who retails his goods in the streets of Naples, on his over-laden donkey, then comes on the scene; but he cannot carry off his goods without paying the Camorrista a

few sons for portorage, he himself at last being compelled to be his own porter. Now this is what happened last Thursday in the market of St Anna della Paludi. It is what occurs in every market, every street, every corner of Naples, and what has happened from time immemorial. St Anna was the spot then fixed on for a determined attack last Thursday. Besides the guards in plain clothes, the market had been surrounded early in the morning by police and carabinieri, while a tolerably strong force of Bersaglieri was in attendance close at hand. On a sudden every gate and way of exit was closed, and the guards came down on the astonished people. Flight or resistance was out of the question; and the end of the matter was that fifty-seven of the most notorious of the order were netted, bound together by a long rope, and surrounded by the public force, carried off to the nearest police station. An immense crowd, consisting of their relatives and associates, had collected; but no attempt at rescue was made, for things had been admirably arranged, and the public force was too strong to allow of any such attempt being made without danger. At the station they were soon committed and sent off to prison in parties of ten; and a glance was sufficient to shew of what different conditions they were composed. There was the Piciotto (the novitiate of the order), without shoes and in his shirt sleeves; and the full-blown Camorrista dressed as a gentleman, with his fingers covered with rings, and a gold chain round his neck. After a long series of crimes the Piciotto may hope to attain the dignity of this rank, which insures him who holds it ease and comparative wealth. Such a man seldom appears on the scene; he is one of the directors—one of the wire-pullers, and many a wire has he pulled which has cost the life of an opponent. I may instance two cases—that of our unfortunate countryman, Mr Hind, and lately of the man called Borelli; but the annals of blood in this province, if examined, would furnish an incredibly large number of such cases.

The *razzia* in the market of St Anna della Paludi was followed on Saturday by another in the fish-market, with like success. This spot lies on the Marina, *en route* to the railway, and the space between the two places has long been celebrated for the robberies committed on carriages conveying strangers to and from the railway. Here every morning are brought in fish from all parts of the bay, consigned to the contractors, who again supply the retail dealers. A good business, therefore, is to be done by the Camorrista in this place; and no wonder is it that it should be thronged with men of that class and thieves. The same operations are performed which I have already described. The right to land is paid for; then the price of the fish is settled, and a certain percentage demanded and paid. Last of all, as in the fruit and vegetable market, the retail dealer has his accounts to settle. These claims have never been disputed—they are sanctioned by usage; and dangerous would it be to resist a secret organisation of ruffians who stick at nothing to maintain their "rights" and inflict vengeance. On this market an attack was made on Saturday, and fifty-seven of the worst characters were netted, there being, as before, a considerable display of the public force. An attempt was made also to arrest some of these fellows at the entrance of the Bourse,

who drive a trade in defrauding poor widows and orphans and getting possession of the certificates of their pensions. Three only were taken, as others who had got scent of the pursuit made themselves scarce.

An Italian friend suggests that the only sure mode of doing away with the Camorra would be to sink Naples under the sea for half an hour, which would be about as practicable as the proposition to drive the Turks out of Europe. If it cannot be destroyed, it may, however, be checked by such *razzias* as we have had of late; but they must be repeated continually. Only two days after the scene of Thursday, some Camorristi presented themselves in the fruit-market and made the usual demand, which was resisted, and the fellows were arrested. The wives too of those who were seized by the police made their appearance, alleging that they were commissioned by their husbands to receive their dues. They too were arrested. From this it is evident that so long as one filament remains, the disease will spread, and that it is the constant application of the knife alone which will eradicate it. It is of good augury, however, that something like resistance was shewn to the demands of the "order." As in Sicily, in the case of brigandage, the consciousness of support and protection from the authorities inspired courage; and it is on the union of these two elements that we must depend for the effectual destruction of this enormous evil. But it will not suffice to lay hold only of the smaller fry; there are men, I am assured, who drive about in their carriages, enriched by the Camorra, and many we meet with no ostensible means of existence, decked out, as I have described, with gold chains and rings.

Splendidly dressed fellows 'with gold chains and rings!' Such are the *élite* of a gang which for generations has dishonestly preyed on every department of trade in Naples—unauthorisedly exacting a percentage on every transaction under threat of the most dreadful penalties. One is glad to hear of the foregoing *razzias* on the confederacy; but from what we know of administrative justice in Italy, as well as of the utter rottenness of society and universal disposition to baffle the operations of the magistracy, the chances are that the captured Camorristi will soon be at large and at their old tricks. The civil law as it stands is incapable of dealing with this species of ingrained villainy. We have hinted at military repression by regular troops as the right course to pursue. W. C.

NEARLY WRECKED.

IN FIVE CHAPTERS.

CHAPTER I.—THE BETROTHAL.

'AND so, Mabel, Wilfred Merton has proposed to you?' The speaker, as he made this remark, laid down the paper which he had been reading, and looked across the room at its other occupant, who was standing in one of the windows chirping to a canary, and addressing it in that peculiar language which is commonly supposed to be gratifying to the feelings of the feathered tribe, however incomprehensible it may be to differently constructed beings.

Mabel hearing herself spoken to, turned round,

and leaving the bird to its own meditations, came to the table, which was laid for breakfast.

'Yes, papa,' she said, beginning to pour out the tea as she spoke; 'and what is more, I have accepted him.'

'Indeed! You didn't think it necessary then, to ask my permission in the matter?'

'Well, you see I'm afraid I rather took that for granted, and so did not think it necessary to ask for it beforehand. And then too you know Wilfred and I have always meant to marry one another some day, and that it really doesn't make any very great difference whether we call ourselves engaged or not.'

'Oh, you have always intended it, have you? May I ask how long "always" has been in this case?'

'Well, do you know, dear papa, I think we first settled it quite definitely when we were five, when Wilfred gave me the ring out of a wire button as an engagement ring,' answered Mabel, smiling brightly.

'That is a long time ago certainly; and I must congratulate you upon the constancy that you have both shewn in the matter. But don't you think that as it has gone on in this way very happily for such a long time, it might go on in the same way still without any more binding arrangement?'

'O no, papa; we want to have it admitted that we are engaged now.'

'But why, my dear? I thought you said a minute ago that it doesn't make any real difference whether you are engaged or not?'

'Of course I meant to other people, not to ourselves.'

'I should have myself thought your remark was a sword that cut both ways,' said Mr Colherne, smiling at his daughter's explanation. 'But I really don't see that it will do you any particular good to be engaged yet,' he went on more gravely; 'it seems to me that it is only tying you down without any positive advantage.'

'I don't care so very much for it myself,' answered Mabel, looking more serious than she had done yet, as she spoke; 'but Wilfred wishes it so much, and I wish it for his sake. You see he hasn't such an indulgent father as you are darling, or such a happy home as I have; and he says it will make him so much happier to feel that I am really his, and admitted to be so.'

'Well, my child, I suppose you will have your own way in this as you have in most things, you spoil young monkey! But you can hardly expect me to feel very much elated by the idea that I shall have to get on some day without my Queen Mab.'

'O papa, now you are looking forward a long way! Why, we don't dream of being married yet, and shan't for ages.'

'This is by no means the first time that that remark has been made, for the consolation and encouragement of unfortunate fathers, who have nevertheless found themselves left alone before very long.'

'But then you know even when I do marry I don't mean to be separated from you. Of course you will always live with us.'

'And feel myself constantly in the way,' said

Mr Colherne, more gravely than he had yet spoken. 'No, my pet,' he went on almost sadly; 'it is the fate of parents to lose their children just when they have learnt to love them most, and I mustn't expect to escape the common lot.'

Mabel went to him and kissed his forehead.

'Come, papa, don't be sad just now; you will make me feel a nasty selfish creature for ever thinking of marrying Wilfred or anybody else.'

'I'm sure I don't want to do that, my queen,' replied her father cheerfully. 'But to return to our original subject. What is there in this Wilfred Merton that makes him so particularly attractive?'

'What a question to ask me, papa! There's everything about him. In the first place, he's so handsome!'

'Well, do you know I think he's very much like everybody else? It seems to me, to quote your favourite Humpty Dumpty, that he has "two eyes so, nose in the middle, mouth under." I must confess that he does not strike me as very remarkable.'

'O papa! everybody thinks him good-looking; and I believe in reality you do too, only you are so fond of teasing me. And then he is so clever!'

'I don't know that "everybody" will agree with you there, at all events. The public do not seem to think him so very clever!'

'Ah, but they will some day, when they have their eyes open, and have seen more of his paintings. But I didn't mean clever in his profession only; he says such clever things.'

'Which means, I suppose, that he says he is very fond of you; ah, Mab!' said her father, pinching her ear as he spoke. Then seeing that she did not seem inclined to reciprocate his lively manner, he went on: 'Never mind what I say, my darling; I can't help being a little jealous of the fellow that proposes taking you from me some day. But as I suppose you must be taken away by somebody sooner or later, I would rather it were Wilfred than anybody else, for I believe him to be a good fellow at heart, and honestly fond of you. I must say too, that it is decidedly a recommendation in my eyes, that as he has not a penny, he will not be able to take you till "later." But I must be off now, my child; I am dreadfully late as it is; you see you have kept me talking so, that I have not noticed the time. Good-bye, Queen Mab; take care of yourself while I am away. But I daresay you will have somebody to help you to do that, he added mischievously as he kissed his pet and left the room.'

Mr Colherne and his daughter were living in a house towards the West End of London. He had been a widower for some years, and Mabel was his housekeeper and companion. He was justly proud of his child, and thought her and everything she did, perfection; and Mabel returned this love with all she could spare from Wilfred.

Mabel Colherne was by no means a beauty. Her eyes were not of the dark flashing order that thrills everybody at whom they look; nor were they of that soft melting kind that infuses tenderness into the most unimpressible at the first glance; roses and lilies had nothing to fear from her complexion as a rival to their charms. Sculptors could have looked at her nose and mouth without feeling the slightest desire to reproduce them in marble; and her throat would not have been

remarked upon as swan-like. But she was a thoroughly honest, healthy, happy looking English girl; and saying *that*, is equivalent to something very pleasant to look at. She looked particularly bright and happy now as she bustled about the room, performing various little acts of household arrangement; humming snatches of airs as she went about her business, and stopping at intervals to continue the conversation with the canary, which had been interrupted before breakfast. Suddenly she stopped in the middle of her avocations as the knocker sounded, and a look of merry mischief coming over her face, she got close behind the door of the room, so that when it was opened she would be hidden. Knowing well whose knock it was, she could not resist the temptation of teasing Wilfred by concealing herself. This might perhaps be considered a somewhat undignified way of receiving a young gentleman who was coming to the house for the first time in his new capacity of an accepted lover; but in extenuation of Mabel's conduct it must be remarked that she and Wilfred Merton had known one another intimately ever since they were children, and that their engagement made but little difference to them.

She had hardly more than time to ensconce herself behind the door when Wilfred opened it and came a little way into the room. He seemed a good deal surprised to find the room empty, as Mabel's habits were very methodical and regular, and he was generally sure of finding her here at this time; and was just on the point of going away again to look for her elsewhere, when a suppressed laugh fell upon his ear, and looking round at the place whence the sound came, he espied Mabel standing there. Shutting the door quickly, he pounced upon her, and seizing the maiden by the wrists, took a lover's revenge for her conduct (in the shape of more kisses than one. She did not resist very vigorously, and suffered herself to be escorted to the sofa with a very tolerable grace.

'Well, Mabel,' Wilfred said, as he sat down by her side, 'have you told your father?'

'Yes, Wilfred,' she answered demurely.

'And what does he say?'

'Oh, he won't hear of our being engaged,' she said, speaking very solemnly.

A look of such blank disappointment and astonishment came over her lover's face, that Mabel burst out laughing. 'Why, you silly boy,' she said gaily, 'to take it in, and look so dreadfully unhappy! You don't suppose that I mean it, do you?'

'Well, you looked very grave as you spoke,' returned Wilfred, seeming half-disconcerted at having believed Mabel's nonsense; 'and I could not be quite sure that you were joking.'

'Solemn old fellow! Have you ever known papa say no to me when I wanted anything? And besides, was my reception of you of a kind to lead you to believe that I was feeling depressed?'

'Perhaps you wouldn't have felt depressed even if Mr Colborne had said no,' returned Wilfred in a misanthropical tone of voice.

'I'm not going to answer such nonsense that seriously,' said Mabel; 'perhaps I shouldn't: most likely not, I think.'

'Then he has consented?'

'Of course he has, Wilfred.'

'My darling,' he said, drawing her closer to him, 'now that I know you are mine, I shall not feel unhappy any more!'

'Why, Wilfred, how gravely you speak, and how solemn you look. You are not a bit like your usual bright self this morning. What is the matter with you?'

'It's too bad of me to be out of sorts this morning, my pet, when I ought to be so happy; but I really can't help it. You must forgive me, Queen Mab.'

'But what is it makes you so, Wilfred, dear? Do tell me. You know you always do tell me your troubles; and I have more right to hear them now than ever. Besides, I can't bear being kept in the dark about things, especially when they concern you.'

'Oh, it's nothing very interesting or very new; only another row with the governor.'

'What about?'

'Nothing but a recapitulation of the old grievances; the same thing over again that we've been quarrelling about for I don't know how long—as to what a fool I've been to become an artist, instead of entering that detestable counting-house.'

'I suppose he did not describe it in that way,' Mabel could not help interrupting.

'I am so sick of it all, that I don't know what to do with myself,' Wilfred went on, without taking any notice of her remark.

'What led to the talk on the subject? Something, I suppose.'

'The fact that another picture has been refused admission. It's quite bad enough never to get any success, without his incessantly throwing it in my teeth. I declare I get so discouraged sometimes, I haven't the heart to work at all; and then that makes another trouble.'

'But you can't expect to meet with much success yet; you haven't had time. Almost everybody who has succeeded in the world has been unsuccessful at first.'

'Of course; I know that. But then it's so much easier to bear the fact that other people were disappointed, than it is to bear disappointment one's self. It is so much pleasanter to remember some great artist who wasn't appreciated at first, than it is to have one's own paintings perpetually refused admission everywhere. I feel so sure too that I have got the ability in me.'

'The greater reason for hoping and steadily persevering. But you know you have such a dreadful disadvantage to fight against in being so nearly self-taught as you are: you haven't started fair.'

'Of course not. I told my father so to-day when he was pitching into me; and it seemed to open up quite a new idea to him. He thought a little, and then said that he did not want to be responsible for my failing in the profession I had persisted in choosing—you see he takes my failing quite for granted,' Wilfred added bitterly—'and that if I intended working, he would send me to Paris for a year and pay for my studying there.'

'Wilfred! And are you going?'

'Really I hardly know. I think it is not knowing how to make up my mind about that, added to the bother of my father's everlasting grumbling, that has made me down so this morning. Of course I should very much like the advantage it would give me; but then comes the pang of parting from you, and particularly just now.'

'Does your father know that our engagement is settled?'

'Yes; I told him so.'

'And what does he think of it?'

'He says that it is ridiculous nonsense for me to be engaged to anybody; though of course he prefers you to any one else, as he likes you better than anybody. But darling! he burst out passionately, 'don't mind what he or any one else thinks or says on the subject: my only chance of getting on and doing anything worth doing, is the certainty that I can think of you as mine!'

'You know, Wilfred, that my heart always has been yours, and that it always will be, whatever happens. But I wish Mr Merton had not suggested this Paris scheme; I don't like the idea of it.'

'You have only to command me to stay at home, Queen Mab, and I will throw every other consideration to the winds.'

'No; I don't wish that. Act as you would if you did not know me at all; I could not bear to feel that I had put any obstacle in the way of your success.'

Their talk during the rest of the time they were together was grave and sedate, quite unlike the usual conversation of two young lovers.

When Wilfred had gone, Mabel was more sad than she cared to admit; the interview seemed to have altered matters very materially.

CHAPTER II.—THE PARTING.

It was settled that Wilfred should go to Paris.

Mr Merton was a banker in a good position in London, and he had naturally wished Wilfred, who was his only child, to enter into his office and succeed him in his business. But unfortunately for his schemes, the boy had at an early age developed a strong taste for drawing, and this taste, which had been discouraged rather than fostered, had grown with his growth, until his father had been obliged to admit to himself that it was useless to try to coerce him, and that the lad must be allowed to take his own way. Giving in to an unavoidable necessity, and giving in to it gracefully, are, however, two very different things, and Mr Merton chose the former course. He allowed his son to become an artist, because he saw very clearly that he could do nothing else, but beyond that he did scarcely anything for him; with but scanty instruction, he was, as Mabel had said, very nearly self-taught.

Had Mrs Merton lived to see her boy grow up, things would have been no doubt on a very different footing between father and son; her influence would have been used to soften the disagreement between them; and a woman's influence is rarely ineffectual. But unhappily for them both, she had died when Wilfred was about ten years old; and he and his father were left to rub the angles of their natures against one another, without any one to round the angularity off.

And so it came to pass that when Mr Merton offered to send Wilfred to Paris, although there were many reasons for which the young man would have preferred remaining at home, he thought it would not do to refuse his father's offer, and so accepted it, and prepared for leaving home.

From the moment that this idea had been first communicated to Mabel, she had had a great and

unaccountably strong dislike to it; and now when it was resolved upon, and the time of Wilfred's going was drawing near, an excitable restless feeling came over her, that made her depressed and miserable. This depression so haunted her, that she could not help looking upon it as an omen and a warning.

She tried hard to repress this boding feeling, but in vain; and tried also, and with more success, to keep it from Wilfred's sight; but at last when the day of his departure had arrived, and he had come to say good-bye to her, she could restrain herself no longer, and to his surprise and dismay besetted him to change his mind and remain at home!

'Why, Mabel, my darling,' he answered, clasping his hands round her waist as he spoke, and looking down fondly at her, 'what do you mean? You have never said a word against my going until now.'

'No; I have been trying not to think of it. But O Wilfred! I have such a strong feeling in my heart that some harm will come of your going; I have had it ever since you first spoke of it. Do stay.'

'You can't be well, my pet; it isn't like you to have such fancies.'

'I know it isn't; but I am quite well; and it is because I am not generally fanciful or nervous that I am so much impressed by the feeling I have now. Do listen to me.'

'My dearest,' said her lover, kissing the upturned face, 'it is too late to change my plans now. Shake off this fancy, my queen, for it is only a fancy. I like going so little myself, Mabel, that you mustn't make it more difficult to me.'

Mabel resolutely withheld herself from saying any more on the subject; but the feeling of dread that she could not explain was strong upon her still, and it was very hard to keep it to herself. When Wilfred left her she clung to him as though the parting were to be for ever; and when she found herself alone, the anticipation of evils to come came back with redoubled force.

CHANGE-RINGING.

THE frequent allusions to bells by our poets are directly conclusive to the strong attachment which binds these sounds to English ears. We all delight in listening to the merry peal, and yet notwithstanding our fondness for the same, and although all our days of rejoicing are considered incomplete without the ringing of bells, it is strange how very little is understood either of the art or science of what is termed change-ringing.

Ringing bells in changes is peculiar to England. When rung thus, the bells are necessarily rung 'up,' that is, each bell, by an arrangement of wheel and rope, is gradually swung until, after describing larger and larger arcs, it swings through a complete circle at each sound or stroke of the clapper. The swinging motion also materially increases the sweetness of the tone. When bells are rung in changes, each bell is brought to a balance after each revolution; and when the bell 'runs' well, very little actual strength is required, and the work, unless pro-

longed, is not so exhaustive as many suppose. In this as in many other things, it is more 'knack' than strength that is required. The tenor bell of the ring of twelve at St Saviour's, Southwark, weighs fifty-two hundredweight; and the wheel, in the grooves of which the rope for ringing it runs, is about nine feet in diameter; yet this ponderous bell with its huge gearing has often been rung by one man for four hours without rest, involving more than five thousand changes; and was once rung for six and a half hours by one man. This, however, was a great feat.

A number of bells hung together is called a 'ring,' the number generally varying from five to a dozen, which last is the greatest number that has yet been hung in a steeple. When the highest note—the treble bell—is sounded first, and followed by the consecutive notes until the deepest or 'tenor' bell is struck, the bells are said to be rung in 'rounds.' And it is worthy of remark that this is the order in which they are rung before 'going off' into changes, and again on 'coming round.'

Those uninitiated in the mysteries of bell-ringing will be surprised to learn that on six bells no fewer than 720 changes can be obtained; that is, the six numbers can be arranged in 720 distinct combinations. The addition of another bell increases the combination to 5040; while on eight bells the enormous number of 40,320 changes may be obtained. As about twenty-eight changes are rung per minute, it takes about three hours to accomplish the whole of the changes on seven bells; and thus to ring five thousand changes is considered a feat, and called a 'peal;' any less number being merely a 'touch.' When changes are rung on seven, nine, or eleven bells, all the eight, ten, or twelve bells are rung, the tenor bell—the key-note—always striking last; this practice is more musical than when the whole number of the bells are working in the changes. Change-ringing upon each number of bells has a distinctive name; thus changes on five bells are called doubles; on six, minor; seven, triples; eight, major; nine, caters; ten, royal; eleven, cinctures; and twelve, maximus.

Changes are produced according to certain laws or 'methods;' and by a previously acquired knowledge of the method, each performer, by watching the rise and fall of the ropes, is able to work his bell in the same path in which it would be found to move if the changes were written down on paper. There are several different methods which are practised—namely, Plain Bob, Grandsire, Oxford or Kent Treble Bob, Stedman's Principle, Cambridge, London and Superlative Surprise, and Double Norwich Court. These can all be applied to the different numbers of bells. Thus a touch of Kent Treble Bob Major is that method rung on eight bells.

Although very few persons could possibly be debarred from practising change-ringing by want of physical strength, a good deal of perseverance is necessary to become a proficient in the art. After acquiring the sleight of hand necessary to ring a bell in rounds, a fair amount of practice is also necessary to obtain the quickness of eye—called 'rope-sight'—to work among the other

ropes, in changes. While his hands and eyes are thus busily employed, the ringer must also listen to ascertain whether the swing of the bell is so regulated that it strikes at a proper interval after the one immediately preceding it. In ringing on eight bells, the eight sounds are produced in about two seconds; a quarter of a second therefore elapses between the sounds of the consecutive bells; and as a variation of a quarter of this time is appreciable to a practised ringer, the error of the sixteenth part of a second would lead to jarring results. The hands, eyes, and ears must therefore be in constant union during change-ringing; and as at the same time the mind must never be relaxed from the consideration of the 'method by which the changes are produced,' the mental and physical powers are kept in pretty active employment.

The fascination which this art has for its followers is shewn by the fact that all the great performances in ringing have been undertaken solely for the honour accorded to such feats. When a peal of five thousand changes is attempted, it is considered of no account unless it is 'true.' The requirements are somewhat exacting. If the same change should occur twice, through an error of the composer, it is a 'false' peal. The ringing must be completed without a stop or hitch; and as at any time during the three hours that will probably be occupied, a ringer may lose his way, and cause the others to be confused, a 'jumble out' will probably ensue; the conductor may miss a 'call,' which is required to carry the changes to the length required, or may make one too many; a man may miss his rope and send his bell over the balance; or a rope may break. Thus until the last change of a peal is struck, it is never safe for the ringers to congratulate themselves upon its performance.

Nowadays long peals are only considered as feats when the same men—only one man to each bell—ring throughout the peal. When a peal of great length is attempted there is, therefore, cause to fear that at the last moment one of the men at the 'heavy end,' as the bells near the tenor are called, may knock up. For instance, in ringing according to Stedman's principle—a very complicated method, on eleven bells—the peal of 7392 changes rung in 1848 in four hours and fifty-five minutes at St Martin's, Birmingham, where the tenor bell weighs thirty-five hundredweight, continued the 'longest on record' until 1851, when it was beaten by the College Youths, a very old-established London society of ringers, who rang 7524 changes in five hours and twenty-four minutes at St Giles', Cripplegate, where the tenor weighs thirty-six hundredweight. The Cumberland Youths, another old London society, thereupon tried to beat this performance by ringing 8184 changes at St Michael's, Cornhill, the tenor of which ring weighs forty-one hundredweight. On the first occasion they 'jumbled out' after ringing nearly six thousand changes; and at a subsequent attempt rang six hours and two minutes, but were then so knocked up that they could not finish the peal, and were compelled to stop when they had rung 7746 changes. Now, although this was longer than the peal rung by the College Youths, it was an incomplete performance, not being continued until the bells returned to the order of rounds, which they would have done at the 8184th

change. The Cripplegate peal was at last beaten by a peal of 8448 changes, rung in 1858, at Painswick in Gloucestershire. Although the tenor of the ring of twelve at Painswick only weighs twenty-eight hundredweight, the College Youths actually attempted to beat this length at St Saviour's, Southwark, where the tenor weighs fifty-two hundredweight. They were, however, unsuccessful, as after ringing over eight thousand changes in six hours and a half, they got into a 'jumble,' and thus a most remarkable feat was lost, and considered of no account, when another half-hour would have completed a performance which might never have been excelled. In their next attempt the College Youths were more fortunate, as on April 27, 1861, they rang at St Michael's, Cornhill, in six hours and forty-one minutes, a peal of 8580 changes of Stedman's Cinques, which still remains the longest length rung in this method on eleven bells.

The College and Cumberland Youths have long been worthy rivals in the different mysteries of change-ringing. While the former society dates its origin back to 1637, the latter claims its descent from an old society called the 'London Scholars,' whose origin, however, is lost in antiquity. The earliest known peal by the London Scholars is one of 5040 changes, rung in 1717; on the ten bells which were then in the tower of St Bride's, Fleet Street. This is said to have been the first five thousand ever rung on ten bells.

The rivalry between the societies of College and Cumberland Youths was at its greatest height in 1777. On January 30th, in that year, the Cumberlands rang 6240 changes on the bells of St Leonard's, Shoreditch. This was the longest which had been rung on ten bells by ten men only, and occupied four hours and thirty-four minutes. The tenor bell at St Leonard's weighs thirty-one hundredweight; and as in ringing these 6240 changes, the ringer would never be in a state of rest, as during nearly five hours he would cause a revolving plaything of over a ton and a half to make 6240 revolutions, it might be supposed that no set of men could easily be found who would be desirous of gaining the empty honour of merely exceeding such a performance by so many more hours or minutes. This, however, was not the opinion of the College Youths, who, on February 18th, in the same year, on the same bells, completed a peal of 10,000 changes in seven hours and twenty-eight minutes. After this the Cumberlands evidently took a little preliminary training on the bells of Shoreditch, as on March 12th they rang 5080 changes; on April 5th, 8120 changes; and then on May 10th capped the College Youths' performance by a peal of 10,200 changes in seven hours and forty minutes. The non-university College men were, however, equal to the occasion, and nine days afterwards rang 11,080 changes at the same place in eight hours and two minutes; a performance so extraordinary, that the Cumberland Youths were fain to let it stand as the longest on record until 1784, when, on March 27th, they actually accomplished, at Shoreditch, 13,000 changes in nine hours and five minutes; which peal until this day remains the longest ever rung on ten bells, when all the bells are rung in the changes.

It might be thought that such prolonged physical and mental exertion would have a bad

effect upon the performers; but, whether it is from the fact that only men of the strongest constitutions take a fancy for such exertion, or that the splendid exercise of ringing is, even when carried to such great excess, really productive of benefit, it yet remains a fact that ringers are noted for the great ages to which some of them live to take part in their favourite exercise. As an instance of longevity, the case of Thomas Barham is especially noteworthy. This man, who was a gardener at Leeds, in Kent, was passionately fond of ringing, and during his lifetime rang in considerably over one hundred peals, each of five thousand changes and upwards. He was born in 1725, and died in 1818, aged ninety-three years. At that time, in ringing long peals it was not regarded as a strict rule that there should be no relief to the performers, or that, as now, each bell should be rung throughout the peal by the same man; consequently there does not seem to have been any ordinary limit to the aspirations of the ringers of those days.

About 1750, Barham and his companions were endeavouring to achieve the extent of the changes on eight bells (40,320 changes), any man who was fatigued being relieved by some other ringer. In one of these attempts, on Monday, March 31, 1755, they commenced ringing at two o'clock in the afternoon, and rang until six o'clock on the Tuesday morning, when the sixth bell-clapper broke, after they had rung 24,800 changes. In this attempt, Barham rang the seventh bell for fourteen hours and forty-four minutes before he required to be relieved. On March 23, 1761, they again attempted it, but had the misfortune to overturn a bell after ringing seventeen thousand changes; but on April 7th and 8th in the same year, they are said to have accomplished the 40,320 changes in twenty-seven hours, the eight bells being manned at different times by fourteen men.

The most remarkable of the records which Barham left behind him were perhaps the 'Veteran' peals in which he took part. When fifty-five years of age, he rang in a peal of 5040 changes of Bob Major, occupying three hours and thirteen minutes, when the average age of the eight performers was sixty-one years. In another peal which occupied three hours and twelve minutes, the ages of the performers were 82, 70, 77, 65, 70, 65, 67, and 86; making an average of nearly seventy-three years. Barham also rang in peals occupying over three hours, when eighty-four and eighty-eight years of age. In Barham's case, it is thus fully shewn that the extraordinary performances he took part in did not in any way tend to disable him in his old age. Southey, in his *Doctor*, mentions a peal of Bob Major rung at Aston Church, near Birmingham, in the year 1796—but really in 1789—when eight men, some of whom he mentions were under twenty years of age, rang 14,324 changes in eight hours and forty-five minutes. This, Southey remarks, 'was the longest peal ever rung in that part of the country or anywhere else.' Certainly it was a very clever performance, considering that the tenor of the ring weighs twenty-one hundredweight; but it was really surpassed by a rival band of ringers, who rang at the same church on October 1, 1793, a peal of 10,360 changes of Bob Major in nine hours and thirty-one minutes.

This continued the greatest number of changes rung single-handed until 1868, when the College Youths rang 15,840 changes in nine hours and twelve minutes at St Matthew's, Bethnal Green. The tenor, however, at Bethnal Green is very much lighter than that of the Aston peal, and the latter still remains the longest length rung with such a heavy tenor, and in point of time exceeds the Bethnal Green performance by nineteen minutes.

So little is known about bell-ringing, that erroneous illustrations are prepared by even the best of our illustrated papers, at Christmas-time, and not a little faulty information regarding the *modus operandi* is added. Very few persons seem to be aware that many matters of practical and scientific interest are to be found in the almost unknown art of change-ringing.

CHRISTMAS IN THE ARCTIC REGIONS.

CHRISTMAS is essentially a family festival: our very earliest recollections of it are of a day spent by the whole family together; a day on which the social distinctions of nursery, school-room, and drawing-room were as far as possible abolished, and on which all the little ones who could behave with anything like discretion were taken to church and dined with the elders. As the children grew up and dispersed to school and college, Christmas was still the day on which all reassembled to make one family once more.

But at length there comes a time when this re-assembling is no longer possible, when the girls belong to new homes and new circles, and the boys are scattered abroad in distant lands, whence only loving thoughts can reach the 'old folks at home.' Then the good old Christmas toast, 'To all absent friends,' becomes full of meaning to the few who still assemble round the dear parental hearth, and is followed by a quiet pause, while imagination travels to all quarters of the globe, and the Christmas greeting unfolds the whole world in its embrace. And the good wishes as they emanate from the home are met by returning thoughts from the sons, the brothers, it may be the husbands, in the distant lands where they too are keeping Christmas, though among circumstances very different to ours, and still striving as much as possible to keep up the customs they loved when they were young.

To us dwellers in Northern Europe, Christmas, with its apparently unseasonable heat, strikes us by its strange incongruity; but how strange must be a Christmas in the far north, where no sun rises to gladden the day on which the Sun of Righteousness rose upon the earth.

A year ago we had the happiness of welcoming back to their homes the latest heroes of the Polar Seas. We do not need to be reminded how, in May 1876, the *Alert* and the *Discovery* sailed from our shores, having for their destination the Pole itself. The Pole was not reached; that was beyond human power; but we felt that all that man could do was done, and we were thankful to see them home again. It is surely enough to have spent one Christmas in such desolation; in a higher latitude than ever man has reached before, and beyond the farthest point to which

even the Esquimaux, the hardy natives of the lands of perpetual snow, have penetrated in their most distant wanderings; beyond the boundary of all animal life on land or sea, there British sailors and British ships have wintered, and the British flag has floated upon a sea of eternal ice. All honour be to them.

It seems to us wonderful that even with every attainable comfort, men should be able to live through an arctic winter, as any disaster to the ships must be certain death to the crews. That this has been the case before now, we know. That it is not invariably the case we know also; and the following account gives us a good picture of the different ways in which two companion vessels spent their Christmas in the frozen sea in 1870, and shews what diverse vicissitudes may be encountered by ships in the same season.

In the spring of 1870, before the war with France had broken out and taken up almost all the thoughts of the nation, Germany sent out two ships, the *Germania* and the *Hansa*, with the hope of reaching the North Pole. As is usually the case in arctic expeditions, little could be done during the first season, and the ships were obliged to take up their winter-quarters off the east coast of Greenland. They had already been separated, so that the crew of one vessel had no idea of the condition of the other. An officer upon the *Germania* thus writes of their Christmas:

'To the men who have already lived many weary months among the icebergs, Christmas signifies, in addition to its other associations, that the half of their long night—with its fearful storms, its enforced cessation of all energy, its discomfort and sadness—has passed, and that the sun will soon again shed his life- and warmth-giving beams on the long-deserted North. From this time the grim twilight, during which noon has been hardly distinguishable from the other hours, grows daily lighter, until at length all hearts are gladdened, and a cheerful activity is once again called forth by the first glimpse of the sun. Christmas, the midnight of the arctic explorer, thus marks a period in his life which he has good cause to consider a joyful one. On no day would it be more natural for him to recall his home; and though far from that loved spot, and cut off from all intercourse save with his little band of comrades, and being, moreover, uncertain whether the ice will retain him in its grasp, as it has retained so many before him, he is right to keep the festival with all cheerfulness; thankful, while remembering what he has already passed through and achieved, and full of firm courage and confidence for the unknown future.

'What are our friends at home doing? was the thought that stirred us all as we prepared to keep our Christmas 1870, in the true German style. We had no suspicion of the mighty struggle in which our Fatherland was then engaged, for what could we know of the affairs of the world, from which no sound had reached us for so many long weeks. Our world was only in our ship, and all around us, in the half-light of the weary monotonous arctic night, lay the snow-white boundless desert of ice, while the snow-laden hurricane howled and moaned through the silence. We thought too of our mates on our companion-ship the *Hansa*, from whom we had been separated. Did they still live? Had they been so fortunate

as to reach the shore, and were they, like us, honouring Christmas? Who could tell?

'For days before the festival, an unusual activity was observable all over the ship; and as soon as the severe storm which raged from December 16th to the 21st had abated, parties were organised, under our botanist Dr Pansch, to certain points of Sabine Island, near to which we were anchored, where, in a strangely sheltered nook, several varieties of a native Greenland evergreen plant, *Andromeda tetragona*, were to be found. A great quantity of this plant was conveyed on board, to be converted into a Christmas tree. Under the orders of Dr Pansch, the *Andromeda* was wound round small pieces of wood, several of which were attached, like fir-twigs, to a large bough; and when these boughs were fastened to a pole, they formed a very respectable fir-tree.

'After dinner on Christmas-day, the cabin was cleared for the completion of the preparations; and on our recall at six o'clock, we found that all had assumed an unwonted festive appearance. The walls were decorated with the signal-flags and our national eagle; and the large cabin table, somewhat enlarged to make room to seat seventeen men, was covered with a clean white cloth, which had been reserved for the occasion. On the table stood the "fir" tree, shining in the splendour of many little wax-lights, and ornamented with all sorts of little treasures, some of which, such as the gilded walnuts, had already seen a Christmas in Germany; below the tree was a small present for each of us, provided long beforehand, in readiness for the day, by loving friends and relatives at home. There was a packet too for each of the crew, containing some little joking gift, prepared by the mirth-loving Dr Pansch, and a useful present also; while the officers were each and all remembered.

'When the lights burned down, and the resinous *Andromeda* was beginning to take fire, the tree was put aside, and a feast began, at which full justice was done to the costly Sicilian wine with which a friend had generously supplied us before we left home. We had a dish of roast seal! Some cakes were made by the cook, and the steward produced his best stores. For the evening, the division between the fore and aft cabins was removed, and there was free intercourse between officers and men; many a toast was drunk to the memory of friends at home, and at midnight a polar ball was improvised by a dance on the ice. The boatswain, the best musician of the party, seated himself with his hand-organ between the antlers of a reindeer which lay near the ship, and the men danced two and two on their novel flooring of hard ice!

'Such was our experience of a Christmas in the north polar circle; but the uncertainties of arctic voyaging are great, and the two ships of our expedition made trial of the widely different fates which await the traveller in those frozen regions; and while we on the *Germania* were singularly fortunate in escaping accidents and in keeping our crew, in spite of some hardships, in sound health and good spirits, the *Hansa* was crushed by the ice, and her crew, after facing unheard-of dangers, and passing two hundred days on a block of ice, were barely rescued to return home.'

Yet even to the crew of the ill-fated *Hansa* Christmas brought some share of festivities. The tremendous gale which had raged for many days

ceased just before the Day, and the heavy fall of snow with which it terminated, and which had almost buried the black huts that the shipwrecked men had constructed for themselves upon the drifting icebergs from the debris of the wreck, had produced a considerable rise in the temperature, and there was every indication that a season of calm might now be anticipated.

The log-book of the *Hansa* thus describes the celebration of the festival: 'The tree was erected in the afternoon, while the greater part of the crew took a walk; and the lonely hut shone with wonderful brightness amid the snow. Christmas upon a Greenland iceberg! The tree was artistically put together of fir-wood and mat-wood, and Dr Laube had saved a twist of wax-taper for the illumination. Chains of coloured paper and newly baked cakes were not wanting, and the men had made a knapsack and a revolver case as a present for the captain. We opened the leaden chests of presents from Professor Hochstetter and the Geological Society, and were much amused by their contents. Each man had a glass of port wine; and we then turned over the old newspapers which we found in the chests, and drew lots for the presents, which consisted of small musical instruments, such as fife, jews-harps, trumpets, &c., with draughts and other games, puppets, crackers, &c. In the evening we feasted on chocolate and gingerbread.'

'We observed the day very quietly,' writes Dr Laube in his diary. 'If this Christmas be the last we are to see, it was at least a cheerful one; but should a happy return be decreed for us, the next will, we trust, be far brighter. May God so grant!'

THE MISTLETOE.

THE following notes regarding the mistletoe, which we extract from Hardwicke's *Science-Gossip*, may be interesting to our readers. The writer informs us that 'the mistletoe abounds far too much in the apple orchards of Worcestershire and Herefordshire, but passes over pear-trees, and long observation has only given me two or three instances where pear-trees had mistletoe upon them. The apple was known to the Druids, and it has been suggested that the wily priests furtively transplanted their mystic plant from apple-trees, where it was sure to grow, to oaks, where otherwise it would be unlikely to be found. This is rendered not improbable by what Davies says in his *Celtic Researches*, that the apple-tree was considered by the Druids the *next sacred tree to the oak*, and that orchards of it were planted by them in the vicinity of their groves of oak. This was certainly an astute plan for keeping up the growth of the mistletoe.

'Blackbirds, thrushes, and fieldfares are fond of the mistletoe-berries, and when their bills get sticky from eating them, they wipe their mandibles on the branches of trees where they rest, and from the seeds there left enveloped in slime, young plants take their rise. I have thus observed mistletoe bushes extending in long lines across country where tall hawthorns rise from hedges bounding the pastures; for, next to apple-trees, mistletoe is most plentiful upon the hawthorn. But rather curiously, in modern times, the parasite has shewn a predilection for the black Italian poplar, which has been much planted of late years; and wherever in the Midland counties this poplar has been

planted, the mistletoe is sure to appear upon the trees in a short time. The lime is also very often obliged to support the plant, which disfigures its symmetry, raising huge knots upon its branches; and I have observed limes that must have nourished protuberant bushes for thirty years or more. The maple, the ash, and the willow have frequently mistletoe bushes upon them; but common as the elm is, that tree almost entirely escapes an intrusion; and indeed I never but once saw mistletoe upon an elm. On the oak it is very uncommon in the present day, and where apparent, it is on trees of no very great age, whatever their descent may be.

My friend Professor Buckman, who has written economically upon orchards in his useful book on *Fruit Cultivation*, asserts that while the mistletoe is hurtful to the tree in hastening its decay, yet in apple-trees it has the effect of pressing on their maturity and fruit-bearing earlier than would be the case without the parasite, which urges a quicker growth upon its foster-parent. The tenant of an orchard would thus be benefited for a few years, though premature decay would be the result.

Authors may differ as to the etymology of mistletoe, but it appears to me that our common English name has no very recondite origin. *Mistion* is an obsolete old English word, used, however, as late as in the writings of Boyle; and this is defined in Dr Johnson's original folio edition of his Dictionary as the state of being mingled. Now this is truly the condition of our plant, which is intermingled with the foliage of other trees, and mixes up their juices with its own; and is indeed in rural places still simply called the *mistle*. If to this we add the old English *tod* or *toe*, signifying bush, we have at once the derivation, meaning the mingled bush, mixed up and growing among foliage dissimilar to its own. Still, in winter its stiff and leathery evergreen leaves and dense bushy aspect give it a visible position on its own account; and thus the epithet of *frigore viscum* given it by Virgil is peculiarly applicable. It is certainly remarkable that the hanging up of mistletoe in houses for mirthful purposes and emblematical of Christmas should so long endure that the Midland towns have their markets filled with it as Christmas approaches, and loads of it find a ready sale in the north of England (and Scotland), where the plant is a rarity, if found at all.

A LOCAL INSTANCE OF CANINE ATTACHMENT.

A correspondent of the *Rotherham Advertiser* writes: 'Stories almost innumerable have been enumerated illustrative of the sagacity of the dog and its attachment to its owner. A remarkable and well-authenticated instance, which may not be uninteresting, has just come under my notice, as having occurred some years ago in the neighbourhood of Rotherham. A person in Rotherham obtained a young shepherd dog, which he retained for a long period. While in his possession it became much attached to the whole of the family, and especially to two of its master's sons. After a time, circumstances transpired which led to the animal being sent to live permanently at the residence of a farmer at Thorpe Salvin. After the lapse of a considerable time, one of the sons of the dog's former master paid a visit to the farm. The dog on seeing him appeared

to be overjoyed, and was most demonstrative in its indications of delight. During his stay it would not leave him; and when it became necessary for him to leave in the evening, the animal could scarcely be restrained, and had to be chained up in the room where the family were sitting. As the visitor was taking leave of his host, the poor animal howled in a most piteous manner, and manifested other unmistakable signs of grief. Immediately he had left the house, the dog all at once became quiet, and settling down on the floor, seemed to be asleep. The strange and sudden change which had come over the animal was remarked, and on the parties going to him, he was found to be quite dead. The singular occurrence became well known in the neighbourhood, and it was regarded that the dog had died literally heart-broken. When the same dog was only a puppy it was attacked and beaten by a bigger dog. The defeated animal shewed his sagacity and at the same time his revengeful feelings, by waiting until eighteen months had elapsed, when it had fully grown, and then he lay in wait for his old adversary as near as possible to where the former combat took place, and gave his former enemy a "drubbing" that nearly cost him his life.'

MONUMENT AND TURF.

FULL in the midst of these gray bounds

A lordly stone upswells;
The scroll, that thrice its bulk surrounds,
The passing stranger tells
Of what renowned line he came,
Who 'neath the marble lies,
What deeds he wrought of mark and fame,
That live when mortal dies.

And deep is graved how high his worth

Was prized, how widely known,
What honours crowned him from his birth,
What grief had raised the stone:
Yet he sleeps calmly on beneath,
Where Silence knocks at Fame;
Nor heeds the pomp made over death,
This blazon of his name.

Some paces off and thou wilt see

A grave of simple show,
As lowly and retired as he
Had been who rests below;
High rank and riches kept afar,
While they enjoyed their day,
The high and low—what social bar
May now divide their clay?

No honours mark the poor man's tomb,

This green secluded spot,
Yet still the pansy's purple bloom
Proclaims him not forgot;
No graven stone reclines above
To mourn the humble dead,
But woman's grief and children's love
Bedew the hallowed bed.

Nor here is any record hung

Of lineage and race,
The turf alone tells whence he sprang
Who fills this narrow space;
His virtues slumber with his dust,
Unrecked of and unknown;
But God in Whom reposed his trust
Receives him for His own.

D. F.

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WAR AND TELEGRAPHY.

It is vexing, even saddening, to think how large an amount of discovery, invention, and skill is applied to the murderous purposes of war. As we advance in civilisation, armies become larger and larger, and more abundantly supplied with agencies we would willingly see devoted to more peaceful purposes. Whether wars of race, wars of creed, wars of ambition, or wars of national vanity, the result is much about the same in this respect. Some consolars tell us that wars by-and-by will become so terrible as to check the desire to wage them: let us hope so, despite present symptoms.

Science has unquestionably rendered a vast amount of aid to attack and defence in war within the last few years. Gunpowder, gun-cotton, dynamite, and other explosive substances for fire-arms, torpedoes, and military mining have had their properties and relative powers investigated with remarkable completeness. Gun-carriages have been so vastly improved, that by Captain Scott's contrivances a six-hundred-pounder can be managed as easily and quickly as a thirty-two-pounder could in the days of our fathers or grandfathers; while by Major Moncrieff's automatic apparatus a gun lowers itself behind the screen of a parapet or earthen battery for loading, and then raises itself twelve or fifteen feet to fire over it.

Photography, again, is applied in a great variety of ways to aid warlike operations. At the office of the Ordnance Survey, or under the supervision of the Director, an amazing number of such photographs are taken, enlarged or reduced from the original dimensions according to circumstances, and multiplied or prepared for printing by a very rapid process of zincography or some other kind of electro-engraving. One of the Reports issued by the Director tells us that he supplies the War Office with photographs of plans of battles, important fortified posts and their surrounding districts, barracks and forts in all parts of the British dominions, &c. All the equipments of troops for the field are similarly photographed or zincographed, as unerring patterns for reference. For such wars

as we have been engaged in during the past five-and-twenty years (happily few in number), such as the Crimean, Abyssinian, and Ashanti campaigns, photographs and zincographs have been supplied in large number to the officers, illustrating all details which the home authorities have been able to ascertain, and which are likely to be useful in the intended operations.

What are we to say of the *torpedo*, and its management by electricity? This is really a wonderful subject, the influence of which on future naval warfare even the most skilled and experienced officers can only dimly surmise. We know that during the civil war in America, the Federal torpedoes wrought more destruction on the Confederate ships than all the guns in the Federal fleet; that, on the other hand, the Confederate torpedoes so effectually guarded the approach to Richmond up James River, that a hostile flotilla was compelled to retire baffled and disappointed. One unlucky Federal ship unwittingly passed over a submerged torpedo at the moment of explosion. And with what result? 'The hull of the ship was visibly lifted out of the water, the boiler exploded, the smoke-funnels were carried away, and the crew projected into the air with extreme velocity. Out of the crew of one hundred and twenty-seven men, only three remained alive—the vessel itself being blown to atoms.' The arrangements have been so much improved since that time, that messages can be sent across a river or estuary from shore to shore through the very wire which is to discharge the torpedo! In every naval war during the last few years, torpedoes have been more or less employed. In what way the weaker Russian fleet has been able to baffle the stronger fleet of the Turks in the struggle of 1877, the newspapers have told us in full detail. There is no necessity for pursuing this part of the subject further, seeing that it was lately treated with some degree of fullness in our pages.

But the greatest marvel of all, in regard to the application of electricity to warlike purposes, is the *electric telegraph*. We know what service the lightning-messenger renders to society generally

in the peaceful daily maintenance of commercial and social intercommunication ; and military men now know what a potent instrument it is in the conduct of field-operations and siege-works. An officer well qualified to judge affirms that the memorable Franco-German War, so disastrous to France, could not have been carried on without the aid of the electric telegraph by the German forces. The warlike struggles engaged in by various European powers in the Crimea, in India during the Mutiny, in China, in New Zealand, in the Austro-Italian provinces, in Morocco by the Spaniards, in America by the Federals and the Confederates, in Holstein during the brief Danco-German War, in Bohemia during the still briefer Austro-Prussian War, in Abyssinia, in France during the struggle against the Germans, in Ashanti—all these were marked by the adoption of the electric telegraph to a greater or less extent.

Many of us remember, from the vivid descriptions written by the special correspondents of the daily newspapers, how terrible were the sufferings of the British troops in the Crimea during the winter of 1854-5, engaged in trench-work and other siege-operations under almost every kind of privation. But we also know how impossible it would have been to learn the news quickly in England and to send instructions, without the aid of telegraphy. An electric cable was for this very purpose submerged in the Black Sea from the Turkish mainland to the Crimea ; while on land, wires were set up from Balaklava to the headquarters outside Sebastopol. Thus it was that daily messages could be exchanged between Lord Raglan's headquarters and the War Office in London—also between the special correspondents of the daily papers and their employers in Fleet Street or Printing House Square. So in like manner, during the struggle arising out of the Indian Mutiny, the advancing British columns contrived, wherever possible, to maintain unbroken telegraphic communication with Calcutta, whereby the viceroy was kept informed of what was going on. Of course the mutineers or rebels destroyed or disrupted the wires wherever and whenever they could ; and to repair the damage thus inflicted formed no small part of the arduous duties of the British officers.

Our little but expensive war in Abyssinia in 1868, marked by a less shedding of blood than almost any other war in modern times, was an engineers' war from first to last. A wild and unknown country was surveyed and accurately mapped out, four hundred miles of road constructed, tube-wells sunk, photographs of various useful kinds taken, and a telegraphic system established. The telegraphic arrangements first made had to be abandoned, owing to the scantiness of the facilities for transporting the necessary materials. The more restricted plan actually adopted was difficult enough, so limited were the means of obtaining wood for telegraph poles. On approaching Magdala, however, Captain St John

(who had the management of this part of the engineering) succeeded in laying down from five to ten miles a day. Short as was the war, this telegraph conveyed more than seven thousand eight hundred messages during the five months of its working, and aided most materially in giving effect to General (now Lord) Napier's well-planned and successful scheme of operations.

Our strange Ashanti War gave further evidence of the formation of a telegraph line through a wild country inhabited by a barbarous people. Lieutenant Jekyll, who had the management of this work, has given a lively account of the difficulties that beset him, and his mode of overcoming them. It was at first intended to fight the war with native levies and to lay down a railway ; but Sir Garnet Wolseley, on landing to take the command, soon found that the natives were not sufficiently reliable, that the country was almost impracticable for a railway, that he must have English troops, and that an electric telegraph would be a highly useful aid. Lieutenant Jekyll, with a small staff, went inland and bought bamboo canes of the blacks, set them up as posts, and laid his wires from Cape Coast Castle to Coomassie at the rate of about two miles a day. A gang of fifty natives helped him. Of these worthies he says : ' They were not promising in appearance, and I was compelled to dispense with the services of those who were *less than four feet high* ! (We italicise these words to shew what pigmies many of the West Africans are.) But they had with them an intelligent headman ; and by dint of supervision, supplemented by a little flogging once now and then, turned out a tolerably useful body for light work, as niggers go.' The line was extended by degrees as far as Acerofumu, about a hundred miles from the coast. An amusing proof was afforded of the tendency of the natives to regard the telegraph as a kind of fetish, charm, or spell. The English one day saw bits of white cotton-thread suspended from tree to tree for several miles, as if to obtain thereby some of the mysterious benefits which the white man evidently expected from the wire. When the native helpers received small electric shocks occasionally, consequent on the testing or using of the line, they made sure that a charm was at work ; and the lieutenant was half afraid his men would run away in terror. The climate was very trying to the English, who, lying ill with fever, got the natives to rouse them when any movements of the receiving apparatus were observed. Nevertheless, this telegraphic line rendered services much more than compensatory for the expense, difficulty, and anxiety of laying, maintaining, and using it.

The truly wonderful and eventful Franco-German War of 1870-1 exhibited the value of electro-telegraphy with a completeness never equalled before or since. A foretaste had been given in the Austro-Prussian or 'Seven Weeks' War' of 1866 ; when four complete and distinct telegraphic organisations were adopted—one with

Prince Frederick-William's fine army; one with that of Prince Charles; one at the king's headquarters; and one in reserve. Each could lay down wires as fast as the headquarters could advance. The speedy termination of the war averted the necessity of constructing field-telegraphs, such as those about to be described.

When the German forces advanced to Paris in the closing months of 1870, the plan pursued with the telegraph was as follows: The ordinary commercial and railway telegraphs were gradually extended over the frontier into France, as the German armies advanced. The field or *stappen* telegraphs maintained communication between the base of operations, the ammunition depôts, and the advanced columns of the various army corps. When the sappers and miners had pushed on to the vicinity of Paris, the ubiquitous wire travelled with them. The materials used were light and simple; the operators employed to transmit and receive messages had been trained in the state establishments; and headquarters were kept instantly informed of any observed movements on the part of the French. The telegraph was indeed in constant use by the Germans—for arranging the transport of ammunition; for hourly communication with the commissariat; for directing the conveyance to Germany of sick and wounded, as well as prisoners; for regulating the traffic on the field railways; for maintaining unbroken connection between the troops, which formed a belt of ninety miles' circumference around Paris; for summoning reinforcements to any point where suddenly needed; and to send news of any gap in the continuity of the immense ring of soldiers encircling the beleaguered city.

If any evidence were needed of the invaluable services rendered by the electric telegraph in the war just noticed, it was furnished by M. Von Chauvin, who attended before a Committee of the House of Commons on Postal Telegraphs in 1876. He stated in distinct terms that the war could not have been carried on without this potent aid.

Our own English system of war telegraphy, organised at Chatham, has been improved from time to time. Light iron telegraph poles are provided, to support insulated wires. There is a travelling office on wheels for the operators; while the materials are carried in specially constructed wagons. So strong is the wire that wheels may go over it; and therefore the line is laid above ground or on the ground according to circumstances. Spikes of peculiar form enable the wires to be hung on trees or walls to meet the contingencies of towns and villages. The nucleus of the staff of operators is a small body of Royal Engineers, under their own officers, comprising about fifty military men, with occasional assistance from others—well organised into superintendents, inspectors, clerks, linesmen, storemen, artisans, and labourers. The wagons for materials contain drums on which the wire is coiled; this is unrolled as the wagon moves on, which is as fast as the operators can lay the line. At the present time, ten thousand miles of prepared wire are said to be kept in store, ready for any exigencies.

We might go on to notice the aid furnished to warlike operations by the electric light; as for instance, at Paris in the closing weeks of 1870, when such a light on Montmartre enabled the

Parisians to gather some knowledge of what the besiegers were about at night. But enough: the brief summary above given will suffice to show how electricity is used in war.

NEARLY WRECKED.

CHAPTER III.—WILFRED'S LETTER.

TIME went by, and nothing happened to justify Mabel's fears. Wilfred seemed to be working hard and getting on well. His talent was pronounced unmistakable by the master under whom he was placed, and he himself was in good spirits about his future. But before very long matters began to change. His letters to Mabel were less frequent and shorter than they had been; he spoke with less openness and frankness of his doings; and it was evident to her that there was a *something* which he was careful to keep from her.

She longed to see Mr Merton, to hear from him what news he had of his son, and whether his ideas about Wilfred corresponded with her own; but she dared not speak to him about it. She knew how hard he had always been to Wilfred, how intolerant of all his faults; and she knew well there would be little mercy to be hoped for him at his father's hands if, as she suspected, he had been taking more to pleasure and less to work lately. She dared not even speak to her father of what she feared, for could she expect even him to think as leniently of her dear one as she did? So she had to go on from day to day keeping her trouble—which was not less difficult to bear because it was only suspected—to herself.

At last, when Wilfred had been about nine months in Paris, but too certain proof arrived of how true her suspicions had been. Mr Collivern was staying away from home—a very unusual proceeding, and Mabel was left alone. He had gone to pass a few days with a friend in Scotland, whither it had been impracticable for his daughter to accompany him.

The morning after his departure, Mabel came down to breakfast rather later than usual, singing a snatch of one of her favourite ditties, and burst open the dining-room door in a way that was indicative of her lively feelings. Her eye lighted upon a letter that was lying in her plate; the writing was that of Wilfred Merton. The missive was almost illegible and very brief, and acted upon her gay spirits like a sudden freezing. It ran as follows:

MY DARLING MABEL.—I must write a few words, the last you will ever have from me, to tell you that whatever may appear, however any one may try to persuade you, I still love you; love you, as I have done all my life, with all the best part of my nature. Believe that, Mabel, my own, always. I write to say good-bye, for I shall never see you again; and yet I never longed to see you as I do at this moment. I feel half mad now, and hardly know what I am writing. How shall I say it; I have nothing to live for, except disgrace, and I will not live for that, I am resolved. Once more, good-bye, dearest and best. Try to forgive me, and then forget me, as every one else in the world will soon do.

WILFRED MERTON.

For an instant Mabel sat quite still, gazing straight before her with one expression, that of blank despair, upon her face. This sudden fearful shock had quite stunned her. But she was not a girl to remain inactive, simply grieving over misfortune, when there was anything to be done. Her resolution was promptly taken. She rang, and a servant appeared.

'Tell Hawkesley to bring the brougham round as soon as he possibly can,' she said; 'tell him not to mind how it looks, but to be at the door as soon as possible.'

'Is anything the matter, miss?' said the man, astonished at this order.

'Yes. I have no time to lose.'

'Is it master, miss?' he asked, with that dreadful habit of his class of questioning instead of doing what is wanted.

'No; papa is quite well. But don't stop now; go yourself to the stable; I haven't a minute to waste.'

In a few minutes more she was seated in the brougham which was fast making its way to Mr Merton's bank in the City.

CHAPTER IV.—THE JOURNEY.

Mr Merton was sitting in the private office of his counting-house with a large book open before him. Just as he was in the middle of some calculation which, to judge from the expression of his face, was pretty abstruse, the door opened and a clerk entered. The banker looked up with no appearance of being pleased at the interruption.

'What is it, Mr Chester?' he said, rather angrily.

'There is a young lady, sir, who says she must see you as soon as possible, and alone.'

'O nonsense. I can't possibly attend to her. Don't you know who she is?'

'No, sir; she wouldn't give me her name, nor tell me her business. I said that I was sure you couldn't see her; but she said it was absolutely necessary that you should do so, and that you would know her directly.'

'You must tell her that it is out of the question for me to see her, if she will not send word who she is, or what she wants.'

'There's no good, sir; I have told her so. But she is quite determined to come; and I thought I had better speak to you, as it seemed so strange to have her waiting about there.'

'Well, in that case I suppose you must shew her in.'

The clerk withdrew, and in an instant returned with a young lady who had a thick veil over her face. Having ushered her into the room, he withdrew and shut the door, leaving Mr Merton and his visitor alone.

No sooner was the door closed than the lady put up her veil and disclosed the features of Mabel Colherne.

'Why, Mabel!' said Mr Merton, appearing considerably more surprised than pleased at finding who his visitor was; 'what in the world brings you here?'

Mabel for her only answer put Wilfred's letter into his father's hands. He read it through without shewing any signs of either surprise or regret, and when he had finished it, handed it back to her without speaking.

'Well, Mr Merton?' she said, feeling impatient at his silence.

'Well, Mabel?' he returned.

'Have you read the letter?'

'Most certainly.'

'And have you nothing to say?'

'What am I to say?'

'Mr Merton,' exclaimed Mabel, hardly able to control herself, 'can you read such a letter from your son, and not care about it?'

'I have given up thinking of Wilfred as my son at all, Mabel. I gave him the chance of rising in his odious profession by sending him to Paris, and what has been his conduct in return for my kindness? He has done nothing but amuse himself, and get into all kinds of disreputable mischief. I should have told you all this before, and tried to persuade you to break off with him; but I did not do so; in the first place, because I was sure you would not listen to me; and in the second, because I did not want to be the means of cutting him off from your affection, and thus rendering his amendment impossible.'

'I have been afraid that something has been going wrong with Wilfred lately. I wish you had told me before; I might have been able to influence him for good.'

'I don't believe that any influence in the world would be useful to him; he is a thoroughly worthless fellow. I paid his debts once upon condition that he would contract no more, but I might have saved myself the trouble; within a month he wanted more money. I was not going to be guilty a second time of the weakness of saving him from difficulties he had brought upon himself, in spite too of all my warnings; so I wrote back to say that I would have no more to do with him.'

'Mr Merton, you will not keep to such a cruel resolution now, with such a letter as this before you?'

'Are you so weak, Mabel, as to be taken in by such nonsense as this? Don't you see that being unable to get at me, he is simply trying what he can do with you?'

'No, Mr Merton; I don't believe that, and won't for a moment. I trust my own instinct, which is a woman's natural guide, and generally a very sure one, and I am certain that Wilfred intends doing something desperate.'

'I have told you before now that my son is a foolish weak fellow, and not worth anybody's love.'

'What is that to me, Mr Merton?' exclaimed Mabel, exasperated beyond endurance. 'I love him, and I can hardly be expected to stand quietly by and let him be ruined, because the affection you ought to bear your son is wanting in your nature. Who knows but that the treatment he thus received under his own father's roof may have'—

'What do you wish me to do? What is there that can be done?' cried Mr Merton, interrupting the girl's impassioned burst.

'I want you to go with me to Paris to see Wilfred, that we may take him away from harm, if it be not too late. If papa had been at home now, he would, I am sure, have gone with me; but I could not wait till he comes.'

'You can hardly be serious in proposing for me to go on such a wild expedition as that, I think?'

'Mr Merton, I am quite sure that that letter means more than you think; and I am determined that he shall not be left to be ruined without an attempt to save him. If you will not come I must and will go alone.'

'You are mad, Mabel! Go to Paris alone, and to see this worthless fellow! What do you suppose the world would say of such conduct?'

'I can't think of that when the person I love best on earth is in such danger, as I am sure Wilfred is now, and there is a chance, however faint it may be, of my saving him. I can answer to heaven and my own conscience for what I am going to do, and I must brave the world. I shall write and tell papa what I have done, and I am sure that he will follow me as soon as possible. Good-bye, Mr Merton; there is no use in my stopping here longer.'

'Stay, Mabel!' he began, detaining her as she rose. 'I cannot possibly allow you to go alone, and I have of course no power of interfering with your actions. If you really are bent upon this scheme, which I still think an utterly mad one, I must, for the sake of my own reputation as much as for yours, accompany you.'

'Believe me that my fears are not uncalled for. I am sure something dreadful is going to happen to Wilfred, and I only dread being too late even now. I am very thankful you are going with me; and am certain that you will never repent it.'

'No thanks: it is only necessity that makes me do it. When do you start?'

'To-night, if possible.'

Mr Merton looked into a Bradshaw that was lying upon the table. 'The train to meet the night-boat leaves London at half-past eight; to catch that you must start from your house at half-past seven.'

'I will do that. Will you meet me at the station?'

'Yes: I will be there at a quarter past eight.'

'Good-bye till then; and thank you again a thousand times.'

Mr Merton attended her to the outer door of the office, and she drove home well satisfied with her mission. Writing to her father, to tell him everything, and what she was going to do, she packed a small box to take with her, and then did little else but wish the day, which seemed interminable, gone. Long before it was necessary, she was at the station; and punctual to the appointed minute, Mr Merton appeared.

After a journey that to Mabel seemed endless, they at length reached Paris, and drove straight to the hotel in which Wilfred lived.

As they stopped, Mr Merton said: 'You may depend upon it we shall find our trouble wasted, and that the object of your anxiety is out somewhere amusing himself.'

Mabel did not answer. She could hear her heart beat as she sprang out of the cab; and without waiting for her companion, entered the court-yard of the hotel, and went to the den appropriated to the *concierge*. That gentleman was reading a newspaper, in which he seemed much interested, and did not look up as she came near him.

'Monsieur Merton, est-il chez-lui?' she asked breathlessly.

The *concierge* put his finger against the word he was reading, in mute protest against being interrupted, and looking slowly up, said rather dreamily: 'Plait-il, Madame?'

'Monsieur Merton, est-il chez-lui?' she repeated more eagerly than before.

The man turned round, and walking with the most provoking deliberation to the other end of the room, where numerous keys were hanging,

looked at the place appropriated to the one belonging to Wilfred's room, and seeing that it was unoccupied, came back to Mabel and answered: 'Oui, Madame.'

'Quel est le numéro de sa chambre?'

'Soixante-deux, au cinquième,' said the *concierge*, returning to his paper as he finished speaking.

Mr Merton had paid the driver and joined Mabel as this conversation came to an end, and they started to mount the stairs to the fifth floor as directed.

Even Mabel's youth and energy could not prevent her from getting out of breath in that long climb; and by the time she and Mr Merton had arrived at the fourth floor, they were obliged to stop and rest.

Before they had stood an instant, they were startled by a loud report of a pistol coming from the floor above them. With a loud scream, Mabel sped up the remaining stairs and entered the room named by the *concierge*.

Mr Merton came almost instantly after her, and found Wilfred lying insensible on the floor, and Mabel kneeling by his side, trying to restore consciousness.

CHAPTER V.—SAVED.

Within an hour, two of the most skilful physicians that Paris could boast were with Wilfred Merton. And when they left him, their verdict was not one to give much hope. He had shot himself in the chest, and it was very doubtful whether he would recover from that fearful self-inflicted wound.

Mr Merton's anguish during those long days and nights while Wilfred lay at death's door was terrible to behold. Alienated as had been his affection for his son while absent, the feelings of parental love returned tenfold, now that he might be on the point of losing that son for ever; and as he nursed his boy with that womanly gentleness which is so touching in a man, it was evident that his whole hope of happiness was bound up in his recovery.

Mr Collierne had, as Mabel predicted, lost no time in following her to Paris, and though he could hardly feel the intense and painful interest in the invalid that his father felt, still for Mabel's sake he became a willing sharer in the nursing.

As for Mabel, hope was very strong in her, and made that time of watching much easier to bear. She could not help believing that that strong determination to cross the Channel had been put into her mind to enable her to save the one who was so dear to her; and in that belief she put her trust.

At last, after long, weary, sometimes almost despairing watching, the patient took a favourable turn. The burning fever ceased; and one day the doctor told the anxious watchers that there was great hope; that indeed, unless any unforeseen complications arose, there was nothing further to fear.

Then the pent-up feelings of Mr Merton—that grief which he had tried so unsuccessfully to conceal from his companions, could be kept in no longer; he threw his arms round Mabel's neck, buried his face on her shoulder, and burst into tears, those tears which, when shed by a man, are so inexpressibly painful to see.

'Mabel,' he said, 'I owe all this to you; if it had not been for you, I should have been my son's murderer.'

Mabel pressed her lips upon his forehead in silence; her heart was too full of thankfulness for speech.

Wilfred was very patient, and manfully bore all the trials of the time. As soon as he was well enough to be able to think of what he had done, a feeling of intense remorse had come over him, and had taken such powerful hold that at first it threatened to throw him back. But the gentle hand of Mabel was a wonderful restorer; a word or two of loving assurance changed this bitter remorse into a quiet sorrow. It happened one day, about a week after this, that while Mabel was reading at the window of the invalid's room, she heard Wilfred's voice gently calling to her. It was as if the voice of her lover had been suddenly restored to him.

'Can you forgive me, my darling?' he asked.

'Am I not a woman, Wilfred? And is it not a woman's privilege to forgive?'

'I don't think you are a woman, Mabel; I think you are an angel.' Few words, but conveying volumes.

From that moment her lover began to mend steadily, though still slowly; every day there was more and more to hope, until at length Wilfred was pronounced wholly out of danger. And then one evening in the dusk, when the lamps were being lighted in the street below them, and the increased hum and buzz of the later day were coming on, Wilfred and Mabel found themselves again alone.

'Mabel,' he said in a low voice, when they had been quite silent for a long time, 'I have been wanting an opportunity to tell you all the wrong that I have done. Shall I tell you now?'

'Yes, Wilfred, now—in this twilight light.' She slid her hand into his as she spoke, and they remained in that position while he told her his story.

There was nothing new about it; it was the old story. Led by bad companions into temptations, his naturally lively and weak nature was not able to resist; ashamed of himself for his own conduct when he found himself outrunning his allowance, and obliged to apply to his father for help. Thrown into despair by his father's harsh conduct to him, he had plunged still more wildly into the excesses and dissipations of his leaders, till at last, horrified at what he was doing, and seeing no means of escape from the snares in which he had allowed himself to be caught, he had written that letter to Mabel; had waited, vaguely hoping for he knew not what, for some days, and had ultimately sought to put an end to himself in a fit of intense depression. Weakness, that shoal which is even more fatal, because more hidden than wickedness, had wrecked him, as it has wrecked so many. In the deep remorse that he now felt, he greatly exaggerated the wickedness of his conduct, for though he had been guilty of grievous folly, he had done no positive or irremediable wrong either to himself or others. The only actual definite sin he had committed was the suicidal one, from the consequences of which Mabel's resolution had happily saved him.

When he had finished this history, he paused an instant, and then added, without looking at her:

'And now, Mabel, that you have heard all this, do you still say that you forgive me? Can you still love me?'

'A love would be very useless, Wilfred, that deserted its object just when it was most wanted; I hope my love is a truer one than that.'

'Mabel, my beloved,' said he, drawing her closer to him as he spoke, 'if it had not been for you, I should have been beyond the power of repentance now. Your affection has saved me once, and it shall keep me from harm now, for ever!'

Before very many years had gone by, Wilfred Merton's name was known as that of a successful young painter. He and his wife were settled in London, and were able to live in very comfortable style. They had no children, which was their only serious drawback to happiness; but if ever Wilfred, seeing his wife look longingly at some merry group of little ones, and guessing her thoughts, tried to console her, she would put her hand into his and say, her truthful eyes looking full at him as she spoke: 'I have you, Wilfred, beside me, and I am content.'

The foregoing narrative, which is founded upon events which actually took place, may be turned to advantage by those parents who are prone to thwart the natural inclinations of their children, or cut them adrift without a proper guide. The career of many a man has been blighted by the mistaken, though perhaps well-meant policy of a father who, desirous to see his son follow up his own profession, has tried to compel that son to work contrary to his inclination, with results more or less disastrous.

GEMS AT RANDOM STRUNG.

THE history of precious stones, those beautiful objects which have strongly appealed to the imagination of men in all ages, has been written many times; and yet their latest chronicler is doubtless justified in assuming that the knowledge of them in its practical sense is not widespread; that even in the jeweller's trade there are many who are not skilled in detecting the real measure of difference between one stone and another, either by the specific gravity, which supplies the essential test, or by the minor tests of rarity and quality. In treating of the history and distinguishing characteristics of *Precious Stones and Gems*, Mr Streeter has certainly conferred a benefit on 'the trade;' to the general reader the book can hardly fail to be of interest, for it puts a captivating subject before him under a variety of aspects, and appeals successfully to imagination as well as to taste for exact knowledge.

From the magnificent specimens which the rescued Sindbad carried away with him when he tied himself with his turban to the rock's leg, on through a long succession of fable and of history, diamonds will never cease to enchant mankind, having always taken the lead in interest, as they have been supreme in value among those treasures of the mineral kingdom which are called gems or precious stones. Ages before men discovered that their beauty could be enhanced by handiwork, their rarity and their price had endowed them with a surpassing charm; and now, when handiwork has been brought almost to perfection, and science has dispelled the mystery with which

the diamond was invested, they maintain their immemorial supremacy. In company with Mr Streeter we may trace the beautiful things from their habitat in India, the Brazil, South Africa, the Ural Mountains, and Australia, through their history in the ancient times and in medieval days, when they formed the theme of many fables and the object of much superstition.

The diamond dwells in the same lands and in the same strata with many other gems, but it is the most precious as it is the most difficult to find; and though its nature resembles theirs in many respects, in one it is unique—it is the hardest of all known substances, and belongs to those bodies which refract light most strongly. Its magnifying power is greater than that of glass; but it is seldom used for microscopic lenses, owing to the great difficulty of making them perfectly accurate. It was believed to possess double refraction, but that has been disproved; and the deviation which gave rise to the error is traced to the existence of internal air-bubbles, as in amber, by which the course of the light is altered. It is the triumph of cutting to exhibit these qualities to the highest degree, and thus did Babinet, a great authority on diamonds, test them. 'In a sheet of white paper he bored a hole somewhat larger than the diamond to be tested: he let a ray of sunlight pass through the hole, and holding the diamond a little distance from it, yet at such an angle as to allow the ray to alight on a point of the flat facet, he found this facet to be forthwith represented on the paper as a white figure, whilst all around little rainbow circles were delineated. If the observer found the primary colours red, yellow, and blue definitely separated one from the other in these little circles, and if their number were considerable, and they stood at equal distances from each other, then he pronounced the brilliant to be well cut.'

From Mr Streeter we learn that in commercial estimation, coloured gems stand far behind the diamond; inasmuch, he tells us, that this stone represents ninety per cent, and the others altogether only ten per cent. of the quantity on sale. A hundred years ago, Brazil became the rival of India in the production of diamonds, and the finders were the poor mulattoes and negroes, who explored for them the sterile wilds of Minas-Novas, and sold them to the merchants. The story of the discovery of these gems at Bahia is as follows: A slave who came from Minas-Gerics was tending his master's flocks in Bahia, and he noticed that the soil resembled that of his native place. He groped in the sand and found seven hundred carats of diamonds. He ran away, and offered the gems for sale in a distant city. Of course such wealth in the hands of a slave aroused suspicion, and the negro was arrested and sent back to his master, who tried in vain to come at a knowledge of his secret. At last he hit upon him of sending the slave again to tend his flocks at Bahia, and he watched him. Again the slave-shepherd groped in the gem-hiding sand, and the truth was discovered. Then came numbers of wealth-seekers from Minas-Gerics and other parts of Brazil, so that the next year twenty-five thousand men were diamond-hunting in Bahia, and the amount daily obtained for some time rose to one thousand four hundred and fifty carats. The trade was a

prerogative of the Portuguese crown, and Lisbon was the chief emporium of the gems. The precious things are of fluctuating value. In 1836 they were very dear; but in 1848 the price fell; and a few years ago there was 'a glut in the market,' in consequence of Dom Pedro's having paid the Brazilian state debt to England in diamonds instead of money, when the price fell fifty per cent. in the Leipzig market.

Mr Streeter, who has great faith in the future of Queensland as a diamond-field, gives a most interesting account of the discoveries in New South Wales, that wonderful colony, whose long-delayed luck has come at last, and from all sides at once; but dwells at length and with exultation upon the Cape diamond-fields. 'South Africa,' he says, 'is richer, and its produce is far more to the purpose of modern history, and to the supply of the precious stones, which form our wealth of gems, than the old diamond-fields of the East or West.' The history of the discovery of gems in the colonies partakes of the romance which attended the discovery of gold; and is not free from the tradition of crime and misfortune, which rests upon similar revelations in the Old World. Idle as are the superstitions which impute specific evil influences to certain gems, it is not to be denied that there have been many instances of 'fatal jewels;' and that cruelty, injustice, and terrible human suffering have attended the rifling of the earth's bosom for those mysterious treasures formed by her wonderful chemistry from an invisible component of the atmosphere. Many of the strange stories of medieval alchemists deal with the attempt to make diamonds, and Mr Streeter tells us of the experiments which have determined their nature and combustibility. There is a fascination to the imagination in the following description of the burning of diamonds:

'In 1750 the Emperor Francis I., at Vienna, subjected, in the presence of the chemist Darzet, diamonds and rubies worth six thousand florins to the heat of a smelting-furnace for twenty-four hours. The diamonds were found to have totally disappeared; but the rubies remained, and appeared much more beautiful than before. In 1771 a magnificent diamond was burned at Paris in the laboratory of the chemist Macquer. Hence arose a great discussion. The diamond had disappeared: but whither? Had it volatilised? Had it burned? Had it exploded? No one could say. Then stepped forward a celebrated jeweller, by name Le Blanc, who asserted the indestructibility of the diamond in the furnace, stating that he had often placed diamonds in an intense fire to purify them from certain blemishes, and that they had never suffered the smallest injury.' (This has been done also by Mr Streeter with similar results.) 'The chemists D'Arcet and Bonelle then demanded of him that he should make the experiment on the spot in their presence. He took some diamonds, inclosed them in a mass of coal and lime in a crucible, and submitted them to the action of the fire. He had no doubt that he should find them safe. At the end of three hours, on looking into the crucible, they had utterly disappeared.'

Then appeared upon the scene the famous Lavoisier, he to whom the Convention refused a fortnight's reprieve from the guillotine, just as he was on the threshold of a probably sublime discovery in the science of light; Fouquier-

Tinville returning him for answer that the Republic had no need of chemists and savants. In the presence of Lavoisier, Mailland, another jeweller, took three diamonds and closely packed them in powdered charcoal in an earthen pipe-bowl in a strong fire; and when the pot was taken out, there lay the diamonds in the powdered charcoal untouched. It was, however, gradually discovered that it was only by entirely shutting out the air, and therefore the oxygen with which the carbon combines, that the diamonds were preserved from burning; whereas by the simple admission of air, of which oxygen is a constituent part, diamonds burn just the same as common coal. This was proved by Lavoisier in 1776; and Davy subsequently shewed that the diamond contains no hydrogen. So, when the most precious object which the earth produces is burned, the gas formed from its combustion is just that which our fires and our gas-burners yield, and our own bodies too, by the combustion which attends their living; and, says Mr Streeter, 'the old fable of the maiden from whose lips fell diamonds, may have a really scientific basis after all.' It takes immense heat to burn a diamond, and if it were possible to collect the black material which covers the surface during the process, it would be found to be simply soot.

The origin of the diamond is still a matter of scientific investigation and dispute; and the various opinions concerning it may be collected under two heads: (1) The diamond is formed immediately from carbon or carbonic acid by the action of heat. (2) It is formed from the gradual decomposition of vegetable matter. The various methods by which the supporters of the respective theories suppose the transformation to have been wrought, are full of interest and suggestion. In Brazil it was discovered that the matrix of the diamond is itacolumite, and it is said that the gems obtained from itacolumite sandstone have rounded angles and corners, whilst those from the sandy schist are perfect crystals. 'If,' says Mr Streeter, 'this be a fact, we must believe that the agency which changed the sandstone into itacolumite acted also on the diamond.'

Whether in the mines or by the rivers, whose 'golden sands' are flecked with gems, in rich Brazil, the labour of procuring these beautiful gems is great, and large specimens are rarely found; so rarely, that big diamonds have their histories—terrible histories too often—like heroes and race-horses. They are weighed by the carat, a word which Mr Streeter considers to have been derived from the name of a bean, a species of *Erythrina*, which grows in Africa. 'The tree which yields this fruit is called by the natives "kuara" (sun), and both blossom and fruit are of a golden colour. The bean when dried is nearly always of the same weight, and thus in very remote times it was used in Schangallas, the chief market of Africa, as a standard of weight for gold. The beans were afterwards imported into India, and were then used for weighing the diamond.' It is estimated that in ten thousand diamonds rarely more than one weighing twenty carats is met with, while possibly eight thousand of one carat or less may be encountered. An elaborate system of rewards and punishments is adopted in the Brazilian mining and river-searching works; but it is believed that in spite of this, one-third of

the produce is surreptitiously disposed of by the labourers.

The histories of those world-famous diamonds the Sancy, the Regent, the Koh-i-noor, the Blue (or Hope) diamond, and others, have been related before, and history and romance have dealt with the misery and crime, the evil passions and the mystic fancies, involved in the stories of some of these. In a few lines Mr Streeter gives a sketch of the Brazilian contribution to this many-chaptered story, which is not generally known. 'The discovery of these precious stones in 1746,' he says, 'proved a great curse to the poor inhabitants of the banks of the diamond rivers. Scarcely had the news of the discovery reached the government, ere they tried to secure the riches of these rivers for the crown. To effect this, the inhabitants were driven away from their houses to wild far-away places, and deprived of their little possessions. Nature itself seemed to take part against them: a dreadful drought, succeeded by a violent earthquake, increased their distress. Many of them perished; but those who lived to return on the 18th May 1805, were benevolently reinstated in their rightful possessions. Strange to say, on their return the earth seemed strewn with diamonds. Often the little ones would bring in between three and four carats of diamonds.'

Next to the diamond comes the oriental ruby, and in former days it was more prized than the gem, which has a genus all to itself. The ancients gave immense sums for fine specimens of the ruby variety of 'corundum,' or aluminous stone. In Benvenuto Cellini's time a perfect ruby of a carat weight cost eight hundred crowns, whilst a diamond of like weight cost only one hundred. The two most important rubies ever known in Europe were brought to England in 1875. One was a dark-coloured stone, cushion-shape, weighing thirty-seven carats; the other a blunt drop-shape of 47½ carats. Mr Streeter thinks that the London market would never have seen these truly royal gems but for the poverty of the Burmese government; and adds an interesting account of the estimation in which rubies are held in the distant Land of the White Elephant. The sale of the two rubies caused such excitement that a military guard had to escort the persons who conveyed the precious packet to the vessel. No regalia in Europe contains two such rubies. The smaller was sold abroad for ten thousand pounds; the larger has also found a purchaser, but Mr Streeter does not tell us at what price. The great ruby of the kings of Burmah is said to be as large as a pigeon's egg, and of wondrous quality; but is a treasure which no European eye has ever seen. Very few rubies pass out of the country; the king is excessively fond of these gems, and prohibits the export of them. The Burmese have strange notions about rubies; 'they believe that they ripen in the earth; that they are at first colourless and crude, and gradually become yellow, green, blue, and last of all red—the being considered the highest point of beauty and ripeness.'

The sapphire, the emerald, and the opal (the last erroneously supposed to exist in India, whereas it is found almost entirely in Hungary), the turquoise, and the cat's-eye (a rare variety of the chrysoberyl, and inferior in hardness to the diamond and sapphire only), are, each in

its turn, the subjects of Mr Streeter's lucid and learned exposition; after which he passes to the less valuable classes, pearls, onyx, and the gems used for engraving and other purposes. The increasing estimation in which the true Ceylonese cat's-eye is held (it is one of the most fashionable gems at present, and there are specimens in the market worth upwards of one thousand pounds), renders the following particularly interesting: 'In India the cat's-eye has always been much prized, and is held in peculiar veneration as a charm against witchcraft. It is the last jewel a Cingalese will part with. The specimens most esteemed by the Indians are those of a dark olive colour, having the ray so bright on each edge as to appear double. It is indeed wonderfully beautiful with its soft deep colour and mysterious gleaming streak, ever shifting, like a restless spirit, from side to side as the stone is moved; now glowing at one spot, now at another. No wonder that an imaginative and superstitious people regard it with awe and wonder, and believing it to be the abode of some "genius" or djinn, dedicate it to their gods as a sacred stone.'

THE INN AT BOLTON.

WHEN I was a little boy—I am now an old man of sixty—Aunt Oliver, as we used to call my father's widowed sister, was in the habit of paying long visits at my father's house. She had not long been a widow; and though past the meridian of life, was still a beautiful woman. But what made her so exceedingly popular with all my father's children was her repeated kindnesses, displayed to us in the shape of various useful and ornamental gifts, carefully chosen to suit our several ages and characters; but above all, her wonderful condescension in giving up her own pursuits on many a winter's night, that she might recount to us, as we sat grouped around the nursery fire, some of the incidents of her varied and eventful life. She had been a great traveller in her day, having been to Rome, and even visited the Holy Land; and what is more, she had written a book of travels! a circumstance which caused us to regard her with a strange curiosity almost amounting to awe; a feeling on our part which, but for her uniform kindness, might have detracted from that universal love we one and all bore towards her. One of my aunt's adventures made a strong impression on my youthful mind, and is even now, after a lapse of half a century, still fresh in my recollection. Thinking it might serve to divert those who have a fancy for the humorous, I have gathered up the threads of the story from the storehouse of my memory, and now present it in narrative form, under the foregoing title.

My uncle, Mr Oliver Brown, was, in the iron trade; and in connection with his business, which was a very large one, was in the habit of paying periodical visits to the manufacturing town of Bolton, near to which his principal iron-works were situated. He usually paid these visits alone; but on the occasion of which I am about to speak he was accompanied by my aunt, who deemed it her duty to be with her husband, as it was winter-time and he had only just recovered from a severe illness. It was late in the evening of a bleak November day that the coach which conveyed Mr

and Mrs Oliver Brown from their comfortable country-seat, distant some fifty miles from Bolton, entered the noisy ill-paved streets of that bustling town, and proceeded to what at that period was the principal inn of the place. Both travellers were tired by their journey, and after a hasty dinner, were glad to retire to rest.

'Did you say number twenty-seven, second floor?' inquired Mrs Oliver, addressing the lady at the bar, as she took a chamber candlestick from her hand and proceeded to mount the stairs.

'Twenty-seven, second floor,' responded the landlady with an affirmative nod and a gracious smile.

'Twenty-seven, second floor,' repeated my uncle as he followed in the wake of his more active and enterprising helpmate, who, threading her way up the spiral staircase and along a labyrinth of corridors and passages, had already arrived at the dormitory in question. Mr and Mrs Oliver were soon in bed; and there we will leave them, whilst we look in at number twenty-nine on the same floor, and make the acquaintance of Mr and Mrs Wormwood Scrubbs, the occupants of that apartment. They, like their neighbours at number twenty-seven, were in comfortable circumstances, and like the latter, not much given to travelling for pleasure's sake on a cold raw day in November; but an affair of business which demanded their presence at Bolton had compelled them to sacrifice their ease and comfort, and come to that town on this bleak November day. Mr Scrubbs had long been subject to attacks of gout in the foot; and as he had heard of this disease having a tendency sometimes to shift its seat to the brain or the stomach, when it was apt to assume a more serious type, he had made it a rule to carry about his person in the daytime, and to place under his pillow at night, a certain medicine which an eminent physician had assured him would speedily arrest any such erratic tendency on the part of the malady from which he suffered.

Now, on this particular night, whether from over-exertion, exposure to cold, or some other cause I know not, Mr Scrubbs happened to be visited with certain premonitory symptoms of an approaching attack of gout, whereupon he instinctively felt under his pillow for the valuable specific I have referred to. He then remembered he had inadvertently left it in the pocket of his greatcoat, which he had thrown upon the sofa in the private sitting-room into which Mrs Scrubbs and himself had been ushered on their arrival at the inn; whereupon, being unwilling to disturb his better-half, who was in a profound sleep, he let himself quietly out of bed, and throwing his dressing-gown over his shoulders, proceeded to light his candle. Having done this, he gently opened the door and sallied forth, leaving the door slightly ajar, in order that he might the more easily find the room on his return.

It so chanced just about the time Mr Wormwood Scrubbs was proceeding on the above mission, that Mrs Oliver Brown, who was too fatigued to sleep, suddenly recollected that she had left her reticule with her purse inside it on the table in the room where she and Mr Brown had had their dinner; and wisely considering that it would not be prudent to leave it there till morning, she resolved to descend to the sitting-room and recover the bag at once; accordingly slipping out

of bed, she struck a light, and opening the bedroom door, stepped into the corridor into which it led. She then proceeded to assure herself by a reference to certain figures that were painted over the door-frames of the several dormitories that the room she had just quitted was number twenty-seven and no other; and having satisfied her mind on this point, she left the door ajar, and gliding swiftly along the different passages and down the cork-screw-shaped staircase, soon reached the sitting-room, whence, having found the bag she was in search of, she retraced her steps in the same rapid way, exercising her memory as she went along by repeating the number of the room to which she was returning.

Now Mrs Oliver Brown, who, by the way, had an undoubted bump for localities, had formed an idea—and a very correct idea it was—that number twenty-seven was the second room on the left-hand side of the corridor; but on her return, finding the door of this chamber closed, whilst that of the one adjoining it was open, she not unreasonably supposed she might have made a mistake in regard to the position of number twenty-seven; but, in order to set all doubt at rest upon this point, she was about to refer to the number on the door-frame, when a sudden gust of wind sweeping along the whole length of the passage extinguished the candle, leaving her in utter darkness. Thus situated, Mrs Oliver Brown did what most ladies (and gentlemen also, I think) would have done under the circumstances; she groped her way along the passage till she came to the open door of number twenty-nine, went softly in, shut the door in the same quiet way, and got into bed, where, being greatly fatigued with all she had undergone, she soon fell fast asleep.

In the meantime, Mr Wormwood Scrubbs having repossessed himself of his gout mixture, had also returned to the corridor, where seeing a door ajar precisely as he had left his own, he at once went in, closed the door, blew out his candle, and popped into bed, where my excellent uncle was still sleeping as peacefully as a baby, and utterly unconscious of the recent migratory movements of Mrs Brown, which were destined to produce such an unlooked-for disturbance in the domestic arrangements of the two families occupying respectively numbers twenty-seven and twenty-nine.

Mr Wormwood Scrubbs, however, though now quite easy both in body and mind, was unable to sleep, and lay awake, first thinking of one thing and then of another, till he was suddenly recalled to the stern realities of life by hearing his wife's voice proceeding apparently from the adjoining room. In a state of immense perplexity, he struck out with his sound leg in the direction of the sleeping figure at his side, when having come in contact with a plump warm body corresponding to that of his amiable helpmate, he paused, and suspending all further investigation for the present, calmly awaited the issue of events. Nor had he very long to wait.

Mrs Wormwood Scrubbs was a lady of a highly nervous and excitable temperament, with whom, when once roused, it would be about as useless and dangerous an experiment to attempt to argue as with a tigress surrounded by a litter of famished cubs. She had just waked up from her first sleep, when happening to put her hand upon that part of the conventional couch where her Wormwood's head

was wont to rest, she found it brought in contact with a lace nightcap, and a profusion of long curls that had escaped from beneath it.

'Why, what's this, Scrubbs? What tomfoolery's this you're after? What's this, I say?' tugging, as she spoke, at the head-dress of her supposed husband. 'Why, goodness gracious, it isn't Scrubbs after all!'—as starting up in bed, my aunt in gentle but startled accents implored her to be quiet.

'But who are you? and what are you doing in number twenty-nine?'

'Number twenty-nine! Surely this is not twenty-nine, but twenty-seven,' doubtingly returned my aunt, as the idea suddenly flashed upon her that she *might* have mistaken the one room for the other. 'I think I can explain it all.'

'Explain it all! Of course you'll explain it all, and something more than that, before I've done with you, you good-for-nothing impudent hussy that you are!'

'For heaven's sake, be calm, my good woman, or you'll rouse the whole house,' expostulated my aunt in the gentlest manner possible.

'Don't "good-woman" me!' shouted Mrs Scrubbs at the top of her voice, as springing from the bed, she seized the bell-rope and pulled at it with a violence that threatened to carry everything with it. Amid this terrific uproar, Mr Scrubbs and his bed-fellow Mr Brown, who had been vainly trying to make themselves heard from the adjoining room, suddenly appeared candle in hand upon the scene.

As oil cast upon the troubled sea will instantly reduce that element to a state of the profoundest calm, so did the sudden appearance of Mr Scrubbs act as if by a charm to allay in one moment all the angry feelings of Bella Scrubbs, and where only a few moments before all was violence and discord, there now reigned perfect peace and good-will.

The mutual explanations that ensued, it is needless to say, were perfectly satisfactory to all the parties concerned; and after a readjustment of partners, the two families once more took possession of their respective chambers, where I need hardly say they were not again molested during the remaining part of that memorable November night.

ROCKBOUND.

Of the thousands of tourists who flock every year from all parts of the civilised world to gaze upon the picturesque beauties of the Highlands, to muse among the ruined aisles of Iona, or to listen to the diapason of the sea, as it sinks and swells through the pillared caves of Staffa, few, comparatively speaking, care to go so far north as the Shetlands; yet these islands, though generally bare, have a beauty of their own—the breezy, ever-changing beauty of the sea.

The scientific tourist will not fail to find something to interest him in Shetland. There are bold headlands, wide reefs of black crags, and a flora which, although neither rich nor varied, has charms for the botanist. There are broad stretches of sandy beach, not so sterile as they look, but affording, in hidden nooks and crannies, no bad hunting-ground for a naturalist out for a summer holiday. If you are a member of the Alpine Club, there are here no mountains for you to climb, but there are cliffs such as might

well appal the most practised mountaineer; and in summer there is the sun, shining in a cloudless sky nearly all through the four-and-twenty hours. There in summer, midnight is not like the midnights of more southern climes, but is permeated by the rays of a sun, set indeed, but so soon about to rise, that there is scarcely any absence of light.

If you are a painter, you may have sea-views in abundance. You may choose your own time and place and grouping; early morning if you will, with the white mists rolling in over the shimmering sea, and the clamorous gulls hovering above skerries that are crusted all over with dense clinging masses of sea-weed. Or you may wait till the ascending sun rolls back the curtain of mist, and the sea gleams out before you a wide sheet of burnished gold, spangled with the rocky islets of a storm-swept archipelago. The waves roll in at your feet—long majestic ridges of water, dappled with lines of foam; the wide swell of the Atlantic sweeping in from the far shores of Labrador; while from far inland some tiny streamlet tumbles down to the sea through a natural copsewood of dwarf ash and birch and hazel.

Bold points and headlands stand like brave sentinels far out to sea, sheltering little natural harbours where the fisherman's boat rides in safety. Tiny fiords run inland into deep glens, with here and there a fisherman's hut or a crofter's cottage. Perhaps, however, you may have a fancy for foul weather, when the sky darkens like a pall over the sea, and the storm-flood rouses himself from his ocean lair, and the tempest-tossed waves send along in wreaths of foam to break in hoarse thunder upon the shore, or hurl themselves in impotent rage against the face of the steep headland. In Shetland you have grand alternations of calm and storm.

It is perhaps, however, for the student of human nature that Shetland has the greatest attractions. Here he will find a simple, kindly, primitive set of people, of Norwegian descent, but now anglicised in language and usages. They are, however, fond of old legends and stories. Mrs Saxby, the authoress of *Rockbound, a Story of the Shetland Isles*, in a pleasantly told narrative introduces us to this primitive people. We have for the scene of the story an island called Vaalafiel, five miles long, and a little over two in width, with a tiny harbour, and gray old mansion-house set in a strip of scraggy pine-wood. Vaalafiel, Mrs Saxby tells us, 'is coiled upon the sea much in the way a kitten rolls itself together on the hearth-rug—the creature's paws being represented by the narrow belts of land overlapping each other and forming the arms of our voe (fiord), whose crags are very suggestive of claws. Rising abruptly from the shores of this harbour, the island becomes a hill, whose eastern side is a precipice dipping into the German Ocean. The north point terminates in a bold headland, from whence the hill slopes gradually southwards, until it ends in a beautiful stretch of sand, kissed white by the broad waves of the Atlantic. The neighbouring islands cluster north and south, leaving deep narrow channels, where the two great seas keep up a perpetual warfare; and he is a daring sailor who ventures to cross those tideways when their "dark hour" approaches.'

Under the old house of Vaalafiel and the cliffs adjacent to it were wide underground caverns,

such as in the 'good old smuggling times' were no uncommon adjuncts to country houses, and even manse, if they happened to be conveniently near the shore. This smugglers' cave was the scene of a tragedy, such as was of no uninfrequent occurrence among desperate men in these lawless days. A hasty blow struck in sudden passion hurried one rash soul to its last account, and darkened as with the brand of Cain the lives of many others. There is an old nurse, full of well-nigh forgotten Norse superstitions, and a little lonely child, the heiress of the rockbound islet, whose dearest pleasure was to watch the sea on the serene summer evenings when the sky became like a poet's dream, and earth and sea put on the glory of the clouds. Mrs Saxby describes 'the Shetland summer night as not dark at all; it is merely a twilight, which is prolonged sufficiently to assume a character of its own. Not dark, not light, not a brief uncertain mingling of both, but a quiet earnest period of rest, when Nature dreams but does not sleep, and yet is not awake. We call it "the dim," and you can discern objects quite clearly while it broods over the earth.' The wild winter nights have a grand storm-driven beauty of their own, when the Aurora Borealis shoots forth a fitful light, and the nursing of the gray North 'catches glimpses of the beauty dwelling in colour.' The solitary child Inga, bearing in her brave little heart the burden of her father's dimly realised crime, yet cleaving to him, because he loves her, with an affection far stronger than that which binds her to her cold unloving mother, develops into a healthy spirited girl. Lonely and prosaic as her life was, it was not, however, without a salutary admixture of holidays and holiday amusements. The lady of Vaalafiel, although a somewhat stern disciplinarian, was wise enough to recognise the truth of the axiom, that 'all work and no play make Jack a dull boy,' and so upon birthdays and such kindred anniversaries she somewhat relaxed the rigidity of her rule. A fat bullock was killed in honour of the young heiress, and Miss Inga's favourite Newfoundland dog ('evidently desirous of contributing his share to the feast) went off one night to the hills and ran down half-a-dozen sheep. It was found that he had performed the service of a butcher in a perfectly scientific manner; so the animals were carried home and added to the larder.

With such a superabundance of *pièces de résistance*, even the crustiest old bachelor in the world might have found a picnic tolerably enjoyable; and Miss Inga and her young friends had a most delightful day of it in their sweet northern Arcadia, clad as it then was in all its witching garb of summer. 'The sun,' she says, 'rose in cloudless glory, and everything was dipped in sunshine of another kind as well; for Ayton' (a divinity student quite as fascinating as *The Modern Minister*) 'had returned for the midsummer vacation, and that would have been gladness enough for me. There were with him some of his college companions, who made sparkling speeches, sang hearty songs, assisted in distributing prizes to the winning boats, and then challenged the islanders to a football match. Which played best is an undecided question to this day, for each side had a method of its own, and did not comprehend that of its opponent. Then the people were gathered on a smooth meadow near our house, and the plaintive

Foula Reel called upon old and young alike to join in the graceful and truly poetic dance of Shetland. The natural good breeding of the islanders allowed us to remove every restriction on their pleasure, which was characterised by a hearty enjoyment without the slightest approach to excess.

As unlike as possible to a heroine of romance, the child reared in this homely fashion is yet sweet enough to carry blessing and love wherever she goes; to heal old wounds with her simple beauty and goodness; to carry peace into the unforgiving relentlessness of her mother's heart; and to efface the blackness of her father's crime (justifiable homicide, a soft-hearted jury would resolve it into) with tender penitential tears. Miss Inga is in truth a very lovable character, innocent, simple, and yet intelligent; gentle and winning in her ways, although she can be spirited and resolute upon occasion; full of affectionate respect for her stern mother, and of deep romantic devotion for her father, for whose sake she marries without love, which no properly constituted heroine of romance ever does or can do, but which many a good woman has done, to find, as she did, peace and household joy and contentment at a good man's hearth.

Many of the descriptive passages in *Rockbound* are written with considerable vividness and effect, as for instance the storm, through whose agency a crisis in the plot of the tale is worked out. 'A tempestuous morning was breaking, and sea and wind were uttering wrathful warnings of what might befall the unwary fishers who were out on the deep, and I looked out with eyes which scarcely saw—with a mind on which impressions seemed lost. As if still in a dream, I beheld the furious waves come rolling majestically from the far deep and break with thundering sound upon the rocky arms of our voe. As I gazed, there suddenly appeared round a point of the high land a little vessel with closely reefed sails struggling in the sea between Vaalafel and its neighbouring island. Her hull was partially concealed from my view by the arms of our voe, but very soon I seemed to know that it must be the *Seamew*, and that she was attempting to enter the harbour; and a thought occurred to me which was suggestive of peril at once: Why do they try to pass through so narrow and dangerous a strait when the storm is at its worst? As if in answer to my thought, the vessel hoisted a flag of distress, probably with a forlorn hope that some wakeful eye might see it, and then she lay to, as trying to advance in the very teeth of the gale. My father, everything, was forgotten in that breathless moment, as I watched my tiny ship thus turn, pause, and enter the rocky path beset by death. She was evidently being driven by cruel necessity to dare so hazardous a piece of navigation, and I soon discerned that she was no longer manageable. Just then a gust of wind still more furious than before caught her at a critical moment, and in less time than I say the world in, she was tossing among some detached rocks at the entrance to the harbour, a total wreck, and likely to go down every instant.

I had stood terror-bound till then; but the sight of figures clinging to the spars stirred me to action, and I flew to arouse our servants. They were soon hurrying to the neighbouring cottages, in hope of assistance from any men who chanced to be at

home; and I ran along the shore until I reached the crags opposite where the disabled yacht lay. I was soon joined there by numerous women and a few old feeble men, who shook their heads and groaned when I frantically implored them to launch a boat and go to the rescue. "There's no an able-bodied man in the island who kens hoo to handle an oar," they cried; "oor men are a' at the haaf" (deep-sea fishing). "The Lord preserve them this awfu' hoor."

Then for a touch of simple pathos, take the neglected child's scanty recollections of her unloved childhood: 'One of the few things I remember is that I always wore a black frock. This circumstance is impressed on my mind, because I had, and still have, a perfect passion for rich gorgeous colours. Nature in the gray North seldom gave my eyes a feast of radiant hues; no brilliant butterflies and flowers clothing the earth in the garments of heaven; no winter clusters of red berries and wreaths of evergreen. There were some old pictures in the house in which scarlet shawls and purple curtains played a prominent part, and I spent a large portion of the time usually devoted to sleep by sensible children in admiring these, and conjuring up fantastic histories of each portrait.'

Altogether, the book is sweet, fresh, tender-hearted, like a whiff of the foaming ocean spray, quite out of the hackneyed round, and yet sufficiently realistic to impress the reader with a conviction that it is the record of a life which has been lived, which, if not the highest aim of the novelist's art, is yet an indispensable adjunct to it. We have only to add that Shetland is now easily reached by regular steamers plying between Granton (Edinburgh) and Lerwick, the capital of the islands; while we believe a small steamer plies from Lerwick for local accommodation. A summer cruise in a yacht would, however, be the perfection of voyaging for the purpose not only of seeing Shetland, but Orkney and various intermediate islands, such as Fair Isle and Foula, which are out of the way of general traffic. To visit these distant fragments of land in the north, forming the scene of Scott's vivid romance of *The Pirate*, would furnish a new sensation never to be forgotten.

THE MONTH: SCIENCE AND ARTS.

THE Report of the meeting of the British Association held last year at Glasgow has just been published in a goodly volume of more than three hundred pages. Among its contents are Reports of Committees, of which it may be said that the more widely they are known the better; and bearing in mind recent disasters at sea, the investigation of the Steering Qualities of Ships by Professor Osborne Reynolds of Owens College, Manchester, appears the more interesting. 'The experiments of the Committee on large ships,' he remarks, 'have completely established the fact, that the reversing of the screw of a vessel with full way on, very much diminishes her steering power, and reverses what little it leaves; so that where a collision is imminent, to reverse the screw and use the rudder as if the ship would answer to it in the usual manner, is a certain way of bringing about the collision.' This is an important

fact, for it is well known that collisions have been occasioned by the very means made use of to avoid them. And Professor Reynolds says further: 'It appears that a ship will turn faster, and for an angle of thirty degrees, in less room when driving full speed ahead, than with her engines reversed, even if the rudder is rightly used. Thus when an obstacle is too near to admit of stopping the ship, then the only chance is to keep the engines on full speed ahead, and so give the rudder an opportunity of doing its work. These general laws are of the greatest importance, but they apply in different degrees to different ships; and each commander should determine for himself how his ship will behave. . . It is also highly important that the effect of the reversal of the screw should be generally recognised, particularly in the law courts; for in the present state of opinion on the subject, there can be no doubt that judgment would go against any commander who had steamed on ahead, knowing that by so doing he had the best chance of avoiding a collision.'

The statements thus set forth are illustrated by diagrams which shew the position of the vessel after reversal of the screw, and the position after steaming ahead. The latter shews that collision would be entirely avoided.

We frequently read that in future sea-fights the ram will be relied on for running down enemy's ships and sending them to the bottom. But where is the captain at the present day who has had experience of ramming, and of other evolutions which will be required in a fleet of steam iron-clads under quite new conditions? Soldiers can go into temporary camps and get experience in 'autumn manoeuvres'; but sailors cannot have mock-actions and run down ships which cost half a million sterling, nor venture to try the eighty-ton-gun on their consorts. Hence there will be very much to learn in the first great naval battle.

Under these circumstances, Professor Reynolds recommends that small steam-launches should be built of wood, each representing the exact form of one of our large ships, and that with these all possible manoeuvres should be carried out, and officers make themselves familiar with all the effects of the screw on the rudder, with all the conditions of steering, with all the evolutions requisite to bring about or to avoid a collision, and with the effects of ramming. If strongly built of wood, these little vessels would withstand an experimental blow from the ram.

The value of such experiments would be real, for it is now known that the behaviour of a small copy of a ship is exactly the same as that of the great ship, in proportion to the size. The waves set up by the launch bear the same relation to her size as the waves of the ship do to the ship. The recognition of this law marks an epoch in the progress of naval architecture. Given a model, Mr Froude 'can now predict with certainty the comparative and actual resistance of ships before they are constructed.'

The Report of the Committee for investigating the circulation of the underground waters in the New Red Sandstone and Permian formations of England, and the quantity and character of the water supplied to various towns and districts from these formations, conveys information interesting to everybody—for everybody drinks. At Liver-

pool there are wells sunk in the New Red Sandstone which yield more than seven million gallons daily; at Birkenhead the same; at Coventry, Birmingham, and Leamington four millions and a half; at Nottingham nearly four millions; and at Warrington and Stockport more than a million and a half gallons every day. The total makes up a large quantity; but it is nothing in comparison with the supply which the whole area of the New Red may be expected to furnish. This area, says the Report, is certainly not less than ten thousand square miles in extent in England and Wales, with an average rainfall of thirty inches, of which certainly never less than ten inches per annum percolates the ground, which would give an absorption of water amounting to no less than one hundred and forty-three millions three hundred and thirty-six thousand gallons per square mile per annum; which, on an available area of ten thousand square miles, gives an annual absorption of nearly a billion and a half of gallons in England and Wales. As if to heighten the effect of this good news, we are told the 'New Red Sandstone Rock constitutes one of the most effective filtering media known. . . It exerts a powerful oxidising influence on the dissolved organic matter, which percolates it to such an extent, that in the waters of certain deep wells, every trace of organic matters is converted into innocuous mineral compounds.' And again: 'Waters drawn from deep wells in the New Red Sandstone are almost invariably clear, sparkling, and palatable, and are among the best and most wholesome waters for domestic supply in Great Britain.' After reading this, may we not say that Undermere, about which no one will quarrel, is the lake whence great towns in the north should draw their water supply?

During the meeting of the British Association at Plymouth last August, the Mineralogical Society held their second annual gathering under the presidency of Mr Sorby, F.R.S., who in his address gave an account of a new method for determining the index of refraction of minerals, which can be readily employed in their identification. This seems a dry subject; but it is one likely to be valuable and interesting to mineralogists and chemists, and to lead to an entirely new branch of mineralogical study, and to the discovery of a new class of optical properties of crystals. For a proper understanding of the method, a knowledge of optics, of mathematics, and other branches of science would be necessary; but we may state generally that it is based on the fact, that if an object, when placed in focus for examination on the stage of a microscope, is covered with a plate of some highly refracting substance, the focal length is increased; in other words, the microscope must be raised a little farther from the object in order to restore the focus. The distance to which the microscope has been moved thus becomes a measure, which can be accurately determined on a scale to thousandths of an inch. By this measure, therefore, very minute differences of refraction can be determined, and the several minerals identified; and Mr Sorby, in conjunction with Professor Stokes, Sec. R.S., has arrived at certain definite conclusions, which, embodied in numerical tables, may ere long be consulted by all interested in the subject.

On this point Mr Sorby explained in his address: 'On applying this method to the study of various

minerals, the difference is found to be very great. We can mostly at once see whether they give a single unifocal image or one or two bifocal images, and form a very good opinion respecting the intensity of the double refraction, and easily determine whether it is positive or negative. . . . These facts combined furnish data so characteristic of the individual minerals, that it would usually be difficult to find two approximately similar. . . . It has been said that in studying the microscopical structure of rocks it is often difficult to distinguish nepheline from apatite. But the index of nepheline is about 1.53, whereas that of apatite is 1.64, and such a considerable difference could easily be recognised in a section not less than one-fiftieth of an inch in thickness.

The observations hitherto made prove that minerals may be ranged in classes according to their refracting power and their chemical composition. The fluorides are lowest in the scale, while quartz, corundum, the sulphides and arsenides, are among the highest. From these particulars it will be understood that researches into mineralogy have a prospect of becoming more and more interesting.

As we have a British Association for the Advancement of Science, so our neighbours across the Channel have a French Association. It met last August at Havre, and in a few of its fifteen sections manifested signs of activity. Among the meteorologists, diagrams were exhibited shewing clearly that the 'changes of pressure in the upper regions of the atmosphere are by no means similar to those at the surface of the earth; for when the pressure at the lower station decreases, it rises at the upper station, and the reverse; or when it is steady at the one, it rises or falls at the other.' A line of telegraph for meteorological purposes is now erected from Bagnères to the Pic du Midi, seventeen miles. The Pic is nine thousand feet high, and will be an interesting observing station, in constant communication with the lower regions. A proposition was made that the Transatlantic steam-ship companies should be requested to institute regular meteorological observations on board their vessels; and that the captive balloon of next year's Great Exhibition at Paris should be an observing station. Paris is chosen as the meeting-place of the Association for next year, and at the same time a free international meteorological congress will be held.

During recent years it has been said that the marshes and saltish depressions in the territory of Algiers and other parts of North Africa were once covered by the sea, and schemes have been announced for readmitting the sea by cutting channels from the Mediterranean. Mr Le Chatelier, a French chemist, says—the existence of the salts is not due to the drying up of a former sea, but to the masses of rock-salt which exist in the mountains. From these the salt is dissolved out by rain or by subterranean waters, and the saline solution percolates the soil to feed the artesian reservoirs which underlie the desert. These observations will require attention from geographers.

If any apology were required for a somewhat late notice of Dr Sayre's method of rectifying curvature of the spine, it would be found in the fact that among the arts the healing art holds an eminent place, and has special claims on every one's attention. Dr Sayre, an American, has this

year visited England to make known his method of curing those malformations of the backbone under which many persons remain cripples for the whole of their life; and now that it is known, the wonder is that it was not thought of before. In carrying out the operation, the patient is lifted from the ground, and suspended by a support under the chin and back of the head; sometimes a support is placed under the armpits, and sometimes the arms are raised. In this position the weight of the pelvis acts on the crook in the spine, and pulls it straight; a bandage dipped in plaster of Paris is then bound round the body; a few iron splints are inserted in the bandage, and as the plaster dries, a mould is formed, which keeps the straightened bones in place. The suspension is now at an end; the patient is found to be an inch or two inches taller than before the operation, and can walk without limping. After a few days, the plaster-mould is cut up each side, to allow of removal for washing the body; but the two halves are quickly replaced and held in position by a bandage. In some instances six months' wearing of the plaster-mould effects a cure, and the patient enjoys an ease and activity never before experienced.

This method of cure contrasts favourably with the treatment which keeps the patient supine many weary months. As may be imagined, it succeeds better with children than with adults; but even adults have been cured. A case occurred at Cork, the patient being a woman aged twenty-two, and requiring a little mechanical pulling to assist in the straightening; but it was accomplished, and she walked out of the room two inches taller than she entered it.

Mr Hoppe-Seyler, a learned German, has published a paper on Differences of Chemical Structure and of Digestion among Animals, supported by numerous examples, which shew that according to the organism so is the power to form differences of tissue; and he sums up thus: 'Looking at the question broadly, we find that the chemical composition of the tissues and the chemical functions of the organs present undoubted relations to the stages of development, which shew themselves in the zoological system, as well as in the early stages of development of each individual higher organism. These relations deserve further notice and investigation, and are qualified in many respects to prevent and correct errors in the classification of animals. It is generally supposed that the study of development is a purely morphological science, but it also presents a large field for chemical research? This concluding sentence is significant, and should have serious consideration.

Waste pyrites from the manufacture of sulphuric acid is, as regards hardness, a good material for roads when mixed with gravel; but chemically it is not good. In the neighbourhood of Nienburg, Hanover, where roads and paths were covered with waste pyrites, it was found that grass and corn ceased to grow; and a farmer on mixing well-water with warm milk, observed that the milk curdled. The explanation is, that the waste pyrites 'contained not only sulphide of iron and earthy constituents, but also sulphide of zinc, and that by the influence of the oxygen of the atmosphere and the presence of water, these sulphides were gradually converted into the corresponding sulphates;' and these, continually extracted by the

rain-water, soaked into the soil, contaminated the wells, and produced other injurious effects.

The want of really efficient names to distinguish various kinds of manufactured iron has long been felt in the iron trade. The Philadelphia Exhibition gave rise to a Commission which, after discussion of the question, have recommended that all malleable compounds of iron similar to the substance called wrought-iron shall be called 'weld-iron'; that compounds similar to the product hitherto known as puddled steel, shall be called 'weld-steel'; that compounds which cannot be appreciably hardened when placed in water while red-hot shall be called 'ingot-iron'; and that compounds of this latter which from any cause are capable of being tempered, shall be called 'ingot-steel.'

By further exercise of his inventive abilities, Major Monieriff has produced a hydro-pneumatic spring gun-carriage perfectly adapted for use in the field. A gun mounted on this carriage could be made ready for action within ten minutes after its arrival in the trenches.

The Science and Art Department have commenced the publication of a 'Universal Art Inventory, consisting of brief Notes of Fine and Ornamental Art executed before the year 1800 chiefly to be found in Europe.' This is a praiseworthy undertaking, for there are so many rarities of art which can never be seen by the multitude, which can never be moved from their place or purchased, that an inventory thereof with descriptive notes cannot fail to be of great utility. Nearly all the governments of Europe and many rural persons are co-operating in this work, which includes reproductions in possible instances. Some of these reproductions are well known to the frequenters of the South Kensington Museum; for example, the great mantle-piece from the Palais de Justice at Bruges; Trajan's Column from Rome; a Buddhist gateway from India, of the first century; a monument from Nuremberg, and other elaborate works. As a means of reference, this Inventory will be welcome to many a student, and as it necessarily will take many years to complete, there will be the pleasure of watching for fresh instalments of information. But all students should remember that 'the laws of design are as definite as those of language, with much the same questions as to order, relationship, construction or elegance; differing for dissimilar styles as for diverse tongues. The pupil in design has similar obstacles to encounter with those of the schoolboy in his alphabet and grammar; the ability to use the pencil or the brush will no more produce an artist than the acquirement of the writing-master's art with Lindley Murray's rules will make a poet.'

Professor Justin Winsor, one of the American delegates to the conference of librarians held last month, points out with much earnestness that by the extension of libraries a great impetus may be given to national education, and an opening made at the same time for the employment of women. In America, pains have been taken to engage men and women in the work who are content to labour to attain the level of a far higher standard than the public at large have been usually willing to allow as the test of efficiency. 'We believe,' remarks the Professor, 'that libraries are in the highest sense public charities; that they are missionary enterprises; that it is to be supine if

we are simply willing to let them do their unassisted work; that it is their business to see two books read instead of one, and good books instead of bad. To this end it has been urged that one of our principal universities shall have a course of bibliography and training in library economy.'

In reply to various correspondents, we beg to state that the information regarding the manufacture of vegetable isinglass in Rouen, which appeared under the head of *A Few French Notes* in No. 717 of this *Journal*, was taken from *L'Armée Scientifique*, a work compiled by the well-known French savant, M. L. Figuier. As there seems to be some difficulty in reconciling M. Figuier's statements with the present state of the process as carried on in France, we are making further inquiry, and hope to be able to give early and definite information.

A FEARFUL SWING.

THE 'Shaftmen' at our collieries are selected for their physical strength and pluck, in addition to the skill and practical knowledge required for their particular work. The incident we are about to relate will shew how severely the former of these qualifications may at times be tested.

The work of these men is confined to the shaft of the pit, and consists mainly in repairing the 'tubbing' or lining of the shaft, stopping leaks, or removing any obstructions interfering with the free passage of the cages up and down the pit. The coal-pit at N— has a double shaft, divided by a 'batticing' or wooden partition. These divisions we will call A and B. Two cages (the vehicles of transport up and down the pit) ascend and descend alternately in shaft A. At a certain point the shaft is widened, to allow the cages to pass each other, and their simultaneous arrival at this point is insured by the arrangement of the wire-ropes on the winding-wheels over the pit-mouth. The oscillation of the cages is guarded against by wooden guiders running down each side of the shaft, which fit into grooves in the sides of the cage.

On one occasion during a very severe frost these guiders had become coated with ice, and thus their free passage in the grooves of the cages was interfered with. Before this obstruction was discovered, the engine having been set in motion, the downward cage, which fortunately was empty at the time, stuck fast in the shaft before arriving at the passing-point. The ascending cage, whose only occupant was a small boy returning to 'bank,' proceeding on its upward course, crashed into the downward cage in the narrow part of the shaft, where of course there was only a single passage. Though the shock was something terrific, the steel rope was not broken; as the engineman, whose responsible position entails the greatest presence of mind and watchfulness, had stopped the engine on the first indication of an unusual tremor in the rope. Yet such was the violence of the meeting, that both cages, though strongly constructed of iron, were bent and broken—in fact rendered useless—by being thus jammed together in a narrow space. The greatest anxiety was felt as to the fate of the boy, as it was seen that even if he had escaped with his life after such a severe crash, his rescue would be a work of great danger and difficulty.

We may imagine the horror of the poor little fellow while suspended in the shattered cage over a gulf some four hundred feet deep, both cages firmly wedged in the shaft, and the ropes rendered useless for any means of descent to the scene of the catastrophe. The readiest way of approach seemed to be by shaft B, the position of which we have indicated above. Down this then, a Shaftman, whom we will call Johnson, descended in a cage until he arrived at an opening in the brattice-work by which he could enter shaft A. He found himself (as he supposed) at a point a little above where the accident had occurred; and this conclusion he came to from seeing two ropes leading downwards, which he naturally took to be those by which the cages were suspended. Under this impression he formed the design of sliding down one of the ropes, with a view to liberating, if possible, the entangled cages and securing the safety of the unfortunate boy. The hardy fellow was soon gliding through the darkness on his brave and dangerous errand. He had descended about forty feet, when, to his horror and amazement, his course was suddenly checked by a bend in the rope; and the terrible discovery flashed upon him, that he was suspended in the loop of the slack rope, which here took a return course to the top of the downward cage!

It will be understood that when the descending cage stuck upon the runners, as the rope continued to unwind from the pulley it hung down in a loop, descending lower and lower, until the engine was stopped by the meeting of the cages. This loop or 'bight' was naturally mistaken by Johnson for the two ropes, and he did not discover until he found himself in the fearful situation described, that he had entered through the brattice into shaft A below instead of above where the cages were fixed. There he hung then, over a yawning abyss many fathoms deep—closed from above by the locked cages—all below looming dark and horrible.

None of course knew his danger; his hands were chilled by the freezing rope; his arms, already fully exercised, began to ache and stiffen with the strain and intense cold, added to the bewildering sense of hopeless peril. Good need there was then that pluck and endurance he found in the Shaftman! His square sturly frame and unflinching spirit were now on their trial. Had his presence of mind gone or his nerve failed, he must have been paralysed with fear, lost his hold, and been dashed into an unrecognisable mass.

But self-preservation is a potent law, and working in such a spirit he framed a desperate plan for a struggle for life. The guiders running down the inside of the shaft are fastened on to cross-beams about six feet apart. Johnson hoped that if he could reach one of these, he might obtain a footing whereon to rest, and by their means clamber up to the opening in the brattice-work. How to reach them was the next question that flashed lightning-like through his brain. This he essayed to do by causing the rope to oscillate from side to side, hoping thus to bring himself within reach of one of the cross-beams. And now commenced a fearful swing. Gaining a lodgment with one knee in the loop, he set the rope swinging by the motion of his body, grasping out wildly with one hand each time he approached the side of the shaft. Once, twice, thrice! he felt the cold icy face of the 'tubbing,' but as yet nothing except

slimy boards met his grasp, affording no more hold than the glassy side of an iceberg. At last he touched a cross-beam, to which his iron muscles, now fully roused to their work, held on like a vice. He soon found footing on the beam below, and then letting go the treacherous rope, rested in comparative security before beginning the perilous ascent. With incredible endurance of nerve and muscle he clambered upward alongside the guider, by the aid of the cross-beams, and by thrusting his hands through the crevices of the timber. In this manner he reached the opening into shaft B, where the cage in which he had descended was waiting. Chilled, cramped, and frozen, and barely able to give the signal, he was drawn to the pit-mouth prostrate and exhausted. The boy was rescued unhurt by a man being lowered to the top of the cages in shaft A. Johnson suffered no ill consequences, and though a hero above many known to fame, he still pursues his hardy task as a Shaftman; while beneath the homely exterior still lives the pluck and sinew of iron that did not fail him even in his Fearful Swing.

TO MY ROBIN REDBREAST.

The following lines are taken from *The Captive Chief, a Tale of Flodden Field*, by James Thomson (H. H. Blair, Alnwick, 1871).

Now keenly blows the northern blast;
Like winter hail the leaves fall fast,
And my pet Robin's come at last
To our old thorn;
With warbling throat and eye upstare
He greets the morn;

Like some true friend you come to cheer,
When all around is dark and drear.
And oh! what friend to me more dear
Than your sweet self?
Your mellow voice falls on my ear
Like some sweet spell.

Oft at the gloaming's pensive hour,
When clouds above me darkly lower,
I've sought a seat in some lone bower,
With heart oppress'd;
You soothed me with your magic power,
And calmed my breast.

When Morning dons her sober gray
To usher in the coming day,
And Phebus shines with sickly ray
On all around,
No warblers greet him from the spray
With joyous sound.

But you, sweet bird, unlike the throng,
Salute him with a joyous song.
When heavy rains and sleet prolong
The dreary day,
You chant to him your evening song
Upon the spray.

No blackbird whistles in the grove,
Where late in chorus sweet they strove;
No warbler's tongue is heard to move,
But all is sad;
No cushat woos his amorous love
In hazel glade.

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COSTERS AND THEIR DONKEYS.

In walking through any part of the metropolis—be it in the City, the West End, or any part of the suburbs north or south—you will, especially if early in the day, see men with wheeled trucks drawn by donkeys, and laden with fish, vegetables, or other articles for sale to the inhabitants. Rough as they are in appearance, and poor as may be their commercial outlet, these are a useful class of persons; and looking to the vastness of the population crowded within a wide but yet limited space, one has a difficulty in knowing how the ordinary life of many individuals could get on without them. A small town could manage pretty well with a few shops. But in the metropolis, in which there are now from three to four millions of people, the shop-system does not fulfil the general wants; and supernumeraries with trucks to hawk their wares among customers, have sprung up as a convenience and necessity. The name given to these humble street-traders is Costers or Costermongers. Their professional designation is of old date, and is traced to Costard, a large variety of apple. Costermongers were therefore originally street-sellers of apples. The apple might be termed their cognisance.

Henry Mayhew, in that laboriously constructed and vastly amusing work of his, *London Labour and London Poor*, issued some six-and-twenty years ago, describes the costermongers as numbering upwards of thirty thousand. It might be inferred that in the progress of time, the number would have increased; but such, we believe, is not the case. Social arrangements have considerably altered. Owing to police regulations, there is a greater difficulty in finding standing-room in the street for barrows. By improved market arrangements and means of transport, small shopkeepers in humble neighbourhoods have become rivals to the costers. As regards means of transport for traders of all sorts, there has been immense progress within the last few years, on account of the abolition of taxes on spring-carts, and latterly

the abolition of taxes on horses. We might say that for these reasons alone there are in all large towns ten times more spring-carts and vans for distribution of goods from shops than there were a very few years ago. Of course, all this has limited the traffic of itinerant vendors, and prevented any great increase in their number. Under such drawbacks, however, there are probably still as many as thirty thousand costermongers in and about the metropolis. The young and more rudimental of the class do not get the length of possessing donkeys. They begin with hand-trucks, which they industriously tug away at, until by an improvement in circumstances they can purchase, and start a donkey. Having attained the distinction of driving instead of personally hauling, they have enviedly reached the aristocracy of the profession. They are full-blown costers, and can set up their face in all popular assemblages of the fraternity. A costermonger driving his donkey and habitually taking orders for carrots or turnips as he passes the doors of anticipated customers, is in his way a great man. At all events he presents a spectacle of honest labour, and is immensely more to be respected than the pompous 'swell' who sponges on relations, who is somewhat of a tortumetum, and who never from the day of his birth did a good hand's turn.

Mayhew, who deserves to be called the historian of London street-dealers of all descriptions, gives a far from pleasing picture of the social condition and habits of the costermongers. With all their industry, they are spoken of as for the most part leading a dismally reckless kind of life—spending their spare hours at 'penny gaffs,' a low species of dancing saloons, and so on. What he mentions is just what might be expected in a loose, uneducated, and generally neglected population of a great city. If you allowed people to grow up very much like the lower animals, what are you to expect in the way of delicacy? You may be thankful that with the innumerable disadvantages of their condition, and the temptations that surround them, they have the rough good sense to

work for their livelihood, however vagabondising may be their enterprise.

The lapse of thirty years has made a considerable change for the better in the social economies of the costermongers. They have participated in, and been benefited by, those elevating influences which have been assiduously cultivated by city missionaries, by the press, and other agencies. Penny gaffs have almost disappeared. The licenses compulsorily required for singing, music, dancing, and dramatic rooms may be said to have killed them. The costers with advanced tastes and intelligence seek for more rational recreations than were customary in the past generation. Attached to home life, marriages amongst them are more numerous; they pay greater attention to their children; they read more and drink less; notably they are better dressed and kinder to their donkeys. On this last particular we would specially dwell. A consideration for the comforts of the animals dependent on our bounty marks an advance in civilisation. The character of a man may indeed be known from the manner in which he treats his horse, his dog, his ass, or any other creature of which he is the owner. Rude treatment to any of these dumb and defenceless beings who willingly minister to our profit or pleasure, indicates a low type of humanity. The London coster used to be careless about his donkey. As concerns its food, its style of harness, its stabling, and its hours of work, there was no particular attention. Such, generally speaking, is no longer the case. We might say that the rights and feelings of the animal are respected. So to speak, it is better dressed, and is more lively in its aspect. In its face there seems to be a spirit of contentment. The coster, its master, pats it, and addresses it in a far more encouraging and kindly way than was customary in our early days, or even so lately as twenty years ago.

All this is as it should be. Has it ever occurred to any one to inquire why the donkey should have so long been held in contempt and been cruelly tyrannised over? In the East, and in the south of Europe, the ass is esteemed as a useful beast of burden. Alpine regions inaccessible to wheel-carriages, would not be habitable without the services of this sure-footed and easily-kept animal. It is the only carrier, and may be seen patiently toiling with laden panniers on narrow pathways far up in the mountains. In our own country, as an aid in various laborious occupations, the donkey has never been properly appreciated, but on the contrary, it has met with such shameful usage as to stunt it in its growth and sorely to try its naturally gentle temper. Reasons could perhaps be assigned for this undeserved contumely. The poor donkey has no great claim to elegance of form. Its long ears are a reproach; no one being apparently aware that Nature has bountifully granted these long trumpet-shaped ears to enable it to hear at a great distance, and if necessary to escape from its enemies. Another reason is, that

the donkey is too patient and meek to resent affronts. Its submissiveness is imputed to stupidity. If it could stand up for its rights, it would be more thought of. The lion, which is of no use whatever, and is nothing else than a ferocious wild beast, with a proud overbearing look, is highly honoured as an emblem of power and dignity. The ass is hereditarily valueless. It could be adopted only as an emblem of untiring and uncomplaining labour, which would suit no coat of armorial. In the improved treatment of the costermonger's donkey we begin to see brighter days for this hitherto down-trodden creature. The costers themselves being improved through different agencies, their animals feel the benefit of the general advance.

In the vast obscurities of London there is a neighbourhood known as Golden Lane and Whitecross Street, intimately associated with the progressive improvement of costers and their donkeys. A kind of oasis in the desert, this neighbourhood, which is now considerably improved in appearance, shines forth as an important central mission, to the merits of which we can but feebly do justice. We have often had occasion to remark how much good is unostentatiously done by one man, through mere force of character and persevering vigilance. The one man in this case has been Mr W. J. Orsman, who for a series of years has earnestly devoted himself to the amelioration of the condition, moral and social, of the poor street-dealers clustered in and around Golden Lane and Whitecross Street. He acts as honorary secretary to the Costermongers' Society; he edits a little periodical, known as the *Golden Lane Mission Magazine*; and he fosters and helps to maintain many small sub-societies, if we may so term them. Among these are a 'Share Barrow Club,' for lending barrows to men who possess neither donkey-carts nor hand-barrows; a Sick and Burial Club, to which the men pay fourpence a week each; a 'Coster's Friends' of Labour Club, through the aid of which the men can put out small sums at interest, or borrow small sums for limited periods; an 'Emily Loan Club' (named, we believe, after a daughter of the Earl of Shaftesbury), for the benefit of respectable female street-dealers; a Penny Savings-bank; a Maternity Fund; a Soup Kitchen; a Coal Fund; a Clothing Club; a Donkey Club (for purchasing donkeys by means of small instalments), besides others for educational, moral, and religious improvement.

The accounts given of the annual meetings of the costers and their friends are among the curiosities of current literature. Coming prominently forward at these assemblages we perceive the Earl of Shaftesbury, a nobleman who, animated by the kindest motives, deems it no sacrifice to his high position to encourage by his presence and by his speeches the humble efforts made by the costers in the progress of well-doing. A few years since, at one of the annual meetings, which are held in May, the Earl of Shaftesbury took the chair. First, there was tea given to three hundred of the men; then was held a donkey-show, in which the excellent condition of the animals was fully evinced; and then came the event of the evening. The costermongers had bought a donkey of unusual size, strength, and beauty; they decked him profusely with ribbons, and brought him into the Hall. In the names of

all the men, Mr Carter, a vestryman of St Luke's parish, who kindly interests himself in their welfare, presented the donkey to the Earl of Shaftesbury. The Earl, as is said, had already become, in a whimsical and pleasant sense, a costermonger, and now in virtue of his donkey was an accepted full member of the corps. Whether the Earl's Noddy appreciated the honour conferred on him, we do not know; but we may be quite sure that no hard usage was in store for him.

As may be generally known, attempts to encourage the improvement of donkeys have taken place through public shows and the offering of prizes. A Donkey and Mule show, held at the Crystal Palace in May 1874, was the means of giving to many persons their first idea of the real value of an exhibition which some had beforehand laughed at, as an absurdity. It was amply proved that the donkey can become a really beautiful animal when well treated; and it was equally made manifest that rough street-dealers can be as kind as their betters when encouraged to be so. An archbishop carried off a prize; several costermongers did the same; and a truly cosmopolitan feeling was exhibited when the prizes were distributed. The Earl of Shaftesbury, who presided on the occasion, humbly claimed to be a costermonger himself; for (to encourage others in a good work) he had enrolled his name in the Golden Lane branch of the Costermongers' Society. Many of the donkeys exhibited at the Crystal Palace had been employed in drawing carts and trucks laden with vegetables, fruit, fish, salt, sand, firewood, crockery-ware, and other commodities; and the excellent condition of some of them won prizes for their owners. Even a few of the donkey-drivers of Blackheath and Hampstead Heath shewed that the fraternity are not always so rough and unkind as they usually appear. It was asserted that donkeys which do not work on Sunday are generally more active and ready on Monday; so that the trader is but little a loser by this course in the long-run. The Earl of Shaftesbury remarked that: 'It would be seen from the show that these animals are designed by Providence to be of the greatest service to mankind; and that kindly treatment and respect—respect for the wants and feelings of the animals—will bring their own reward in willing service.' Several donkey-shows have since been held in and near the metropolis, conveying the same useful lesson.

In August of the present year, a Pony and Donkey show was held in London, in connection with the Golden Lane Mission and Society. The Earl of Shaftesbury and Lady Edith Ashley kindly and patiently examined the hard-working dumb companions of the costermongers, and exchanged pleasant words with the men. There was a tea for four hundred going on nearly at the same time. After this came a general 'march past,' and a distribution of money and books as prizes. The donkeys were all in admirable condition; while many of the ponies were plump and sleek. His lordship now called for Wilkins, a shrewd prosperous coster of Golden Lane, and bedecked with the insignia of authority as an officer of the Benefit Society. This worthy Colonel Henderson, Chief Commissioner of the Metropolitan Police, declared that the costers are generally deserving of high

praise, and that the police have very little trouble with them—when once the laws relating to the public streets are well understood. After a few more speeches and addresses, the noble chairman said in pleasant humour that he had received a poem entitled *The Earl and the Ass*; that the donkey he had received a few years before at the hands of the costermongers was under the doctor's care; and that this fact alone prevented the animal from being present. Every donkey at the show was known by some name or other; and hence there were many such designations as Tommy, Old Tommy, Black Tommy, Jack, Prince, Paddy, Old Jack, Old Sam, Boko, Charlie, Mike, Ugly Tom, Quick; while the other sex in the race was represented by such feminine names as Jenny, Pretty Polly, Kitty, Pretty Jane, Maggie, and Betsy.

We do not know what was the poem to which the Earl of Shaftesbury alluded, but conclude that it was a poem which appeared in *Punch* relative to the presentation of the donkey to his Lordship. To shew how a facetious periodical can rise above mere jesting, we transcribe the following verses:

Could there be a better gift? The patient beast
Who bears the stick, and will on thistles feast,
Yet in hard duty struggles to the end,
Is always grateful to a human friend,
But seldom finds such friends; is roughly fostered
By costermongers, sellers of the costard,
Sellers of other things from door to door,
And very useful traders for the poor—

He bears a cross, we know; and legends say
Has borne, in memory of a wondrous day,
When love wrought miracles, in stress and strife,
And sick were healed, and dead men raised to life.
Since when, 'twixt hard knocks, hard words, and
hard fare,
He and his owners both their cross must bear.

The Earl, who loves his race, loves other races;
He has sought evil out in darksome places,
And bravely grappled with its many arms,
And tamed its strength, and paralysed its harms;
Brought aid to weakness, moved dead weights
away.

That crushed the soul down, deep in mire and clay.
The greatest, by descending, may ascend:
The peer who is the costermongers' friend,
Dares on the platform stroke an ass's ears,
Rises above the level of his peers.

As an evidence that the endeavours to improve the London costermongers morally as well as physically, have not been thrown away, we may add the following anecdotes.

In 1872 a costermonger named Darby, plying his itinerant trade in the densely packed and comfortless region immediately eastward of the City of London, was one day driving his donkey-cart, laden with cheap fish from Billingsgate. The poor donkey accidentally put his foot into a plug-hole, fell, and broke his leg between the knee and the fetlock—pitching his master out of the cart, and seriously bruising him. His brother-costers advised Darby to kill the animal at once, as no one had ever heard of a donkey's broken leg being healed. But Darby would not listen to this. He took the donkey home, and made a temporary bed for him in the only sitting-room. The man and his wife tended the poor animal, which often groaned with

pain. The wife was a washerwoman at the East London Hospital, but she did not grudge to the poor donkey a little of that time which was so valuable to her. A kind lady then undertook to take charge of the donkey until cured, at a place twelve or fourteen miles from London. With bandaging and careful treatment, aided by the benefit of pure fresh air, the leg became sound in eighteen months; and Darby had a good reply to make to those companions who had said to him: 'Kill it, old fellow; it will never be able to get up again. First loss is the best; nobody can set a donkey's leg. Kill it, old fellow, at once!' The kind-hearted costermonger became known as 'Darby, the donkey's friend.' A testimonial was presented to him by the Ladies' Committee of the Society for the Prevention of Cruelty to Animals; and he is justly proud of it.

As we write, a paragraph appears in *The Times*, communicated by an observer. 'Having occasion to pass through Whitecross Street on Thursday evening, my attention was attracted to some fine turnings on a coster's barrow. Retaining my boyish fondness for a raw turnip, I at once selected one, and putting my hand into my pocket, paid, as I thought, two halfpence, the price charged. I had scarcely advanced a hundred yards, when a tap on my shoulder caused me to halt; and lo! the woman from whom I had made my last purchase accosted me. "What did you give me?" she said. I told her as above, when she opened her hand and displayed two bright shillings, which I had given her by mistake, and which she now returned. Thinking the woman for her honesty, I rectified the matter, reflecting on my way home that the labours of Lord Shaftesbury and his worthy coadjutors among the costermongers could not have been spent in vain; for the cleanliness, civility, and "honour bright" of these small traders are very evident to those who knew the locality ten years ago.'

Our task is ended. We have told all we know about the costermongers, and no doubt much that we have said is not new to many of our readers; but in the way we put it, good may be effected, as shewing the degree of social progress in an industrious and useful class in the metropolis. Donkeys can of course never attain to the beauty, the strength, and the value of the horse. We may admit their inferiority to ponies; but as docile, kept at little expense, and useful in various departments of labour, they have their appointed place in creation. They offer themselves as the poor man's friend and servant. In what numberless cases, as is exemplified by the London costers, might they be employed to meliorate a lot sometimes very hard to bear! We do not bespeak for them more consideration than they deserve. All we expect is that they shall not be treated as abject and worthless. Let us appreciate their unobtrusive willingness to serve to the best of their ability. They ask little, and let that little be conceded. We do not look for elegant turn-outs of donkeys, though we believe the example of a donkey-phaeton has been set by the Baroness Burdett-Coutts, who is never wanting where the welfare of the lower animals is concerned. From our own personal experience, we may tell of employing Donald, our pet donkey, to draw a light four-wheeled phaeton, holding two persons. In bright harness, enlivened with jing-

ling bells, he proceeds on a drive of eight to ten miles with the speed of a quick-trotting pony, and with a cheerfulness which it does one good to look at.

W. C.

A CAST OF THE NET.

THE STORY OF A DETECTIVE OFFICER.

IN FOUR CHAPTERS.—CHAPTER I.

ANY one who feels the slightest curiosity as to the date of my story, can tell pretty nearly when its events occurred, by various incidents mentioned in it, and which the public know quite as much about as I do; but I do not feel inclined, for certain reasons of my own, to identify the precise date or to name the exact spot at which I was employed in the business.

It was a case for the police—for the detective police—and I was the detective employed. Now you must understand that I was not at this time regarded as a regular detective; I was a sergeant in what we will call the 'A' division, and I did ordinary duty; but though I was not yet on the regular detective staff, somehow or another I was very often taken from my usual work and put on all sorts of jobs, sometimes fifty or a hundred miles in the country; and I was once paid a very high compliment by the chief magistrate—of course I mean at Bow Street. He said: 'Nickham, you're not a regular detective, are you?'

'No, your Worship,' I said; 'I am not.'

'Well, Nickham, you're worth a dozen of them; and I have made a special note of your conduct, and shall send it on to the Commissioner.'

The Commissioner was old Sir Richard Mayne then. And that's how I got to be a sergeant; but it was only because I was lucky in two or three cases which the chief magistrate happened to notice.

Well, I was one night at the section-house, for I wasn't on duty (I don't mean the station-house; the section-house is a place where our men lodge, perhaps fifteen or twenty together, or more); and I was sitting in the large room by myself; for it was a fine evening, and none of the men cared much about chess or draughts or things of that kind. I was reading the paper by myself, when the door opened and one of our people looked in. It was Inspector Maffery; and I was very much surprised to see him there, as our place was quite out of his district. Seeing I was by myself, he said: 'Oh!' in a tone which shewed he was pleased at it, and turning to some one outside, he said: 'Come in, sir; the party is here by himself.' With this, a tall, stout, gray-whiskered gentleman came in.

Inspector Maffery closed the door after him, and not only did that, but shot the bolt, and then coming to me at the table, says: 'Nickham, this is Mr Byrle, the celebrated engineer that you have heard of.'

Of course I had heard of him; in fact I once had a cousin who worked in his factory. So I bowed and made a civil remark.

Then Inspector Maffery went on to say: 'This, Mr Byrle, is Sergeant Nickham, one of our most active men, as I have told you, and who, I think, is just the man for you. This place is very safe; and as I have bolted the door, and the men below know I am here, there will be no interruption; and you can say anything you wish to Nickham as well here as anywhere.'

So they sat down; and with a very polite speech, for he was really a gentleman, Mr Byrle told me what he wanted.

He made a long story of it; I shall not; but the public have really no idea of putting facts well together, and presenting them without any excrescences, if I may say so. However, I listened patiently, and found out what was required. It seemed that his factory had been robbed on several nights, in spite of an extra watchman being put on; and only the completely finished and most expensive engine-fittings were taken; shewing that the thief, whoever he was, knew what things to take, where to find them, and where to dispose of them. The robberies were mortifying, because they proved, as all such things do, that the firm were employing a thief, and trusting some one who was deceiving them. The loss of these fittings often delayed other work seriously; and above all, it was considered that it demoralised all the factory (where best part of a thousand hands were employed), by shewing that the firm *could* be robbed with impunity. So, although it was hardly the sort of business which a first-rate man was required to work; and though I say it myself, and though spite and envy in certain quarters kept me off the regular staff, there was not a better man in London than I was, and our people knew it; yet I listened very patiently, and asked such questions as occurred to me. For a civilian, Mr Byrle seemed pretty sharp at catching my drift; while as an old hand, and knowing what was best with the public, Inspector Maffery sat without saying a word, or one now and again at the most, leaving Mr Byrle to settle things for himself. I then roughly sketched out a scheme, which in a few words I laid before the gentleman.

'I understand your plan entirely, Mr Nickham,' said the old gentleman; 'and the sooner you begin, the better, for I feel we shall be successful. Mr Maffery assures me you can be relieved from your duty here at any time; so I trust there will be no delay. I have said money is not to stop you, and you will take this on account of expenses—when exhausted, let me know.' With that he handed me a bank-note, and I thanked him, and of course promised to do my best.

Then Inspector Maffery said: 'I will see to all the essentials, Nickham, so make your preparations as soon as you can.'

Now I liked Maffery very well, and he was certainly one of our best inspectors; but all this civility, taking trouble off my hands and so forth, merely told me that Mr Byrle was a most liberal party, and that Maffery believed he had got hold of a good thing. Mr Byrle shook hands with me, and they went away together, leaving me to think over the business.

I must confess I was a little disappointed—although I could see I was likely to be well paid for my work—in being set at such a very commonplace job as this. After I had traced Lady Brightley's jewels (the reader does not remember this, I daresay, as it was kept very quiet, but I got praised for my management of the case), I thought I should have been selected for the most important work; and when Inspector Maffery brought Mr Byrle in, I really hoped it was about the great Bank-paper robbery.

The reader is quite aware, I have no doubt, that Bank of England notes are printed on paper

specially made for the purpose, and that no other paper has three rough edges, the only clean-cut edge being where the two notes have been separated—and this is one of the great tests of a genuine note. It will be recollected too, how a great quantity of this paper was stolen from the mills at Alverstoke, and the Bank was in a terrible state about it, because as for engraving and all that handicraft sort of work—why, bless me! there's men by the dozen in England and on the continent too—I know some of them—who could print off a note with all the little touches on which the examiners rely, as perfectly imitated as if they had worked for the Bank for years. So when the gang got hold of the genuine paper, it was a serious matter. They took the principal thief, however, and got the paper back. A desperate service it was too, as B—, the chief man in the affair, was one of the most resolute and desperate roughs in London; and the officers that took him ran great risk, and deserved great praise.

Of course the public rejoicing was very great, because nobody had known when the bad notes might come into circulation; but we knew, some of us, that it was all a sham, that a lot of the paper was still missing, and that if the right man got hold of it, there would soon be thousands of forged notes—all fives probably—flying about. It was pretended that all the paper was got back, or that the Bank people thought so, on purpose to make the holders of the remainder think that the hunt was given up; but it was no such thing. Two or three of the best men in the force were to continue the search, and I had hoped I should be selected; but I was told I would not do, because I could not speak any foreign language, and it was thought the men might have to go abroad after the paper. For all that, when I saw Inspector Maffery come in with Mr Byrle, I thought, as I just said, that I was to be chosen. However, I had found out my mistake; and I was thinking over my instructions, when the door opened again. I did not look up at first, supposing it was one of our men; but a cough attracting my attention, I turned round. I saw a slight-built, rather under-sized young fellow, with something of a foreign cut about him, very good-looking though, and a most uncommonly piercing eye; and he at once said: 'I am Mr Byrle's clerk, and have been waiting for him, and he wishes to know where he is to see you?'

'To see me?' I said. 'Why—does he want to see me?'

'I think what Mr Byrle means is, that in case he wants to speak to you, where shall he find you?' replied the young fellow. 'You see I don't know much of the business myself; I only know he has engaged you as a detective.'

'And that's more than you ought to have known,' I said; 'however, Mr Byrle knows his own business best. Tell him that of course he can always hear of me under the name agreed upon, at the *Yarmouth Smack*, where I shall lodge.'

'Under what name, did you say?' asks the clerk.

'I didn't say any name, and I don't mean to say any name,' was my answer. 'If Mr Byrle wants any more information, he had better write.'

'Oh, very well,' says he, quite short and sharp, for I supposed he did not like my manner, and away he goes.

I sat and thought, or tried to think, but I could not get on so well as before; the visit of that young fellow had unaccountably upset me, and I

could not settle down again. Then in came first one, then another, then two or three of our men, and so I got up and went out. I had hardly turned the corner, when I met Inspector Maffery, and it was pretty easy to see by his rosy cheeks and unsteady eye what he had been up to.

'Off for a meditative stroll, I suppose, Mr Nickham?' he says. 'You are the boy for my money.' 'I'm glad to hear it, Inspector,' I said. 'But I don't think much of Mr Byrle's clerk, nor of Mr Byrle himself for his judgment in sending him to me.'

'Mr Byrle's clerk?' he says; and then repeats it: 'Mr Byrle's clerk!'

'Ah!' I said, 'Mr Byrle's clerk. He came with a message from Mr Byrle to know where he should meet me if he wanted to see me. I had already settled with him how I would call at his manager's private house with my report, whenever I had anything to say; and he ought to have been satisfied with that.'

'You are making some mistake here, Sergeant Nickham,' says Inspector Maffery. 'Mr Byrle had no clerk with him; and moreover than that, I've been with him myself till the last five minutes; till he got into the train in fact, and can swear he never spoke to anybody but myself from the time I left you.'

'Then there's a screw loose!' I said; 'there's a something wrong here, Inspector, and we have got to deal with some uncommonly deep files. They have scored the first notch in the game, that's clear; but perhaps we can turn the tables on them all the better for it.'

'If there's a man in the force as can do it, Sergeant Nickham, you are that man,' says Inspector Maffery; 'I'll trust it to you; for my head just now isn't up to the polishing off of such a business. But do what you like.'

'Can I have Peter Tilley for a week, Inspector?' I said.

'Have half a dozen for a month, if you like,' he answered: 'Mr Byrle is that much in earnest, Sergeant Nickham, and he is that rich and liberal, that he would buy up half a division rather than be beaten. So pick who you like, and keep them as long as you like. I will see you all right.'

'Very good, Inspector,' I said. 'Then I will have Peter to-morrow; and don't make any report of this little adventure, not even to Mr Byrle. I think I see the little game, and I will try to spoil it.'

If I had had any doubt as to the Inspector having had quite enough brandy-and-water with Mr Byrle (it was sure to be brandy-and-water, for Inspector Maffery never touched anything else; he said it was ordered for his liver)—I say if I had felt any doubt before, I should have had none after the way he wrung my hand and said: 'If there's a man in the force as can do credit to the force and bring 'em through in triumph, that man is Sergeant Nickham.' And so, with another squeeze of my hand, he walked away with a step so excessively solemn and stately, that it was only a little better—a very little—than staggering across the pavement, in the way of telling what was the matter with him; but Inspector Maffery was not a bad fellow, and never carried favour with those above him, by worrying and spying on those below him, as so we liked the old boy.

Now this was a very awkward incident—I mean of course about the clerk—and shewed me

that my work had already begun, and was likely to be a little more intricate than I had expected. How the stranger came to know so much as he evidently did, I did not trouble myself just then to consider: he *did* know it; that was the fact I was concerned with. Why it was worth his while to take so much trouble about a small affair, I did not much care either, though this was more important, as it was evident some one had employed him, for I would swear he was no smith or fitter; and so it was clear there was a good many in the swim. I don't mean to use any slang if I can help it, but 'swim' is a regular word, you know, and we can't do without it.

My mind was at once made up; I was always very quick in making up my mind, and prided myself upon it. I am bound to admit I often got wrong through it, but perhaps no oftener than people who were slower; and I took care to make a good deal of the times when I was right, and so that covered everything. Now, Peter Tilley, the officer I had asked for, was a man as much about my size and build and colour of hair and eyes, as if he had been my twin-brother; and indeed he was not much unlike me in his features. Any one who knew us would not mistake us for each other, but a casual acquaintance might do so. I was wearing then rather extensive moustaches and whiskers; they gave me quite a military cut; and they were not common in the force then, though any man wears them now that chooses. I at once determined to shave them off—for I never allowed personal considerations to interfere with business—and make Tilley wear a set of false articles as much like my own as possible; and this I knew would immensely increase his resemblance to me as I appeared that day, while I should of course look very unlike myself. Then I would send Tilley to the *Yarmouth Snack*—which was a public-house at which, under some disguise, I had agreed to lodge while on my search—and he could keep his eyes open for anything going on; but he was not to trouble himself much. It was uncommonly likely, I thought, that the spies—for I didn't doubt there was more than one—would make sure that Smith or Brown or Jones, or whatever Tilley called himself, the lodger at the *Yarmouth Snack*, was Sergeant Nickham, and so, as long as they kept him in sight, they had the trump-card, if I may be bold enough to say so, in their hands. And if I had not met Inspector Maffery when I did, when the clerk's visit was fresh upon me, and I was rather out of temper about it, I should probably never have thought of mentioning the matter, and the detective work would have begun on the wrong side.

Byrle & Co.'s factory was close to the Thames, and had a wharf in connection with it, and one waterside public-house would do as well for me as another. In fact, as the receiver was as likely to live on the opposite bank as on their own, I might actually gain by living at some place with the river between me and the factory, for a boat could easier cross the river in the dark than a cart could drive through the narrow streets and lanes without being noticed.

I told Tilley as much of my plan as was necessary; he was delighted to help me, for he fancied I was a rising man, and it was something of an honour to work with me. He was willing

enough to wear the moustache too; indeed this was such a common and natural sort of disguise, that it was adopted quite as a matter of course. I did not tell him that I wished him to be mistaken for me; I took care to choose the moustache and whisker; but it never occurred to him why that particular style was chosen; nor did I tell him, or Inspector Maffery or Mr Byrle, that I was going to shave. There's nothing like keeping your own counsel in these cases; and I resolved that if I had occasion to report anything to the inspector (for he was supposed to have the case in hand), I would actually wear a false moustache myself; but it was specially arranged that I should not go near any of the authorities until I thought it desirable, for Mr Byrle was of opinion that if the least suspicion got afloat with regard to myself, the men who were robbing him were quite fly to watching where I went. (To be 'fly' to a thing, means that you are up to it, or down to it, as some prefer to say.) Well, this was Mr Byrle's opinion, and I am bound to say, after the visit of the sham clerk, it was mine too.

OUR IRON-CLADS.

In our ballad literature not a little is heard of 'the wooden walls of Old England.' History is so full of exploits by three-deckers and frigates, that one feels as if the general disuse of these engines of naval warfare would lead to national disaster. England, however, does not stand alone in exchanging wooden walls for iron-clads of an entirely new type. All the navies of the world have been thus transformed in the twenty years which have elapsed since our last great war. There are ships of war now afloat which could single-handed meet and defeat the whole fleet that followed Nelson and Collingwood at Trafalgar. These great changes have been brought about by the use of armour-plating, the growth of the guns, the improvement of marine engines, and the adoption of machinery to aid in the working and the fighting of the ship. We remember a few months ago hearing one of our admirals, a man of the old school, talking of naval war. 'In past times,' he said, 'war was all courage and chivalry. What is it now? Cunning and machinery!' And to some extent he was right. Cunning and machinery will play a great part in the naval battles of the future; but of course there must be courage, and iron courage too, behind them, or iron plates and monster guns will avail but little. In the new class of war-vessels, the massive plates are bolted on to iron frames; the only wood is the 'backing' of Indian teak behind and sometimes between them. Oak, so far as beams and planks are concerned, has disappeared from the navy. The 'hearts of oak' are left, however, it is to be hoped, in the brave fellows who happily still man our new navy.

Our Navy List tells us that we have something like eight hundred ships of war, including in round numbers sixty iron-clads. These figures given in this way of course require some explanation. In the list are included gun-boats, tenders, store-ships, tug-boats, old wooden ships which are really waiting to be broken up, training-ships, and wooden guard-ships stationed at various ports. Our fighting navy really consists of the iron-clads

and the unarmoured cruisers built for high speed; to these we may add gun-boats of a recent type built to carry one very heavy gun. And with regard to the iron-clads it must be noted that even they are not all fitted to take a place in line of battle. Many of them are ships built from 1861 to 1864, having very thin armour, comparatively light guns, and we fear in many cases worn-out boilers. The *Warrior*, our first real iron-clad man-of-war (for we can hardly count as such the floating batteries), was launched in 1861. She was built on the lines of a fast sailing-ship, and has none of the heaviness of form which was unavoidably given to most of her successors. When she was launched, armour was still in the region of doubtful projects, and it was considered a remarkable success to give her four-and-a-half-inch plates on her central portion only, for the ends were wholly unprotected. The *Warrior* too was an enormously long ship—no less than three hundred and eighty feet from stem to stern; but even this length was exceeded in the sister ships *Northumberland* and *Minotaur*. These ships are neither strong in armour nor handy in manœuvring; they have of course their uses, but they cannot be compared with the later ships constructed when we had acquired some practical knowledge of what an iron-clad should be.

As soon as it was recognised that rapidity in manœuvring—in other words, power of turning easily and certainly—was a necessary quality of a good iron-clad, ships were built much broader in proportion to their length; and this facility of manœuvring was further increased by the general introduction of the twin-screw; that is, the placing of two screw propellers one on each side of the stern-post, each being independent of the other; so that one or both can be used to drive the ship; or one can be reversed while the other continues driving ahead; thus enabling the ship to turn as easily as a boat when the oarsman backs water with one hand and continues pulling with the other.

While the increase of armour kept pace with the growth of the guns, and rose gradually from four inches on the *Warrior* to two feet on the *Inflexible*, a species of internal defence was gradually developed by the division of the ship into numerous compartments; so that if she were pierced below the water-line by the explosion of a torpedo or the blow of an enemy's ram, the water would only partially fill her, and she would still be able to keep afloat. All the later iron-clads have a double bottom, the space between the inner and outer bottom being divided into numerous cells. The body of the ship is divided by the water-tight bulkheads extending from side to side, and from the bottom to the upper deck. To these transverse bulkheads Mr Barnaby, the present chief constructor, has added in all the iron-clads which he has designed a longitudinal bulkhead extending from stem to stern, and dividing the ship into two halves in the direction of her length. Further, there are minor compartments formed by strong bulkheads, designed for the protection of the engines and boilers. In a large ship these compartments of various kinds are very numerous; the *Inflexible* contains upwards of one hundred and twenty; great care, therefore, has to be taken in planning them, in order to insure that this isolation of the various parts of

the ship may not interfere with the working of her guns, engines, and steering apparatus while she is in action.

Side by side with this development of defensive power, there went on an equally rapid development of machinery and mechanical appliances for the working of the ship. The first necessity of an iron-clad is powerful engines, to drive her at a speed of thirteen or fourteen knots an hour on an emergency, though of course in ordinary times a much lower rate of speed is considered sufficient, and the engines work at half their power, or are stopped entirely, while the ship proceeds on her way under sail. But the propulsion of the ship is only one of the numerous duties to be discharged by this new adoption of steam, a power which was only just really establishing itself in our navy when we went to war with Russia in 1854. An iron-clad does not carry anything like the crew that used to be put on board of an old three-decker. Eleven hundred men used to be the complement of a ship of one hundred and thirty-one guns; one-third of the number is more than the crew of some of our most formidable vessels of to-day. In former days guns could be handled and worked by men and even by boys, provided the number of hands were sufficient; and nowadays it is very different work running in and out guns weighing thirty-five, thirty-eight, and eighty-one tons, and dragging along and ramming down shot and shell weighing from six hundred pounds up to three-quarters of a ton, and cartridges each of which contains perhaps more than two barrels of gunpowder. This kind of fighting is work for giants, and so the giant Steam lends his strong hand to do it. Steam turns the turrets of the monitor, steam exerts its force through the medium of hydraulic machinery, checks the recoil of the heavy gun as it runs in, forces the mechanical sponge into its bore, works the shot-lift that brings up the ammunition, works the rammer that drives it home into the gun; finally runs the gun out and points it, the huge gun raising or lowering its muzzle, or turning to right or left, as the captain of its crew touches a valve-handle or presses down a little lever.

But steam is not applied to the guns only; it works the windlasses, winches, and capstans that raise the anchors, bounces up the yards, and lifts stores and heavy weights in and out of the ship, or moves them from place to place. It furnishes power to the steering apparatus, works the pumps, keeps the ventilating fans going; and in ships that shew the electric light at night it drives the electrical apparatus. Engines are made to start engines in some of the newer iron-clads. Instead of moving heavy levers when he wishes to set the engines going, the engineer just touches a miniature engine, which moves the levers of the larger engines for him. And all these more important engines are multiplied and made to act either together or separately, so that in the event of one being disabled, others are left to do its work. We hear of ships of war being fitted with twenty or thirty engines, without counting sundry smaller ones. Those of the turret-ship *Temeraire* are thus divided—two main engines for propelling the ship, with two starting engines; four feed engines, two circulating engines, two bilge engines, four fan engines, one capstan engine, one steering engine, two pumping engines connected with the

hydraulic loading-gear, two turning engines for rotating the turn-tables or turrets, two engines to pump water in case of fire, four engines for hoisting out ashes, one engine for condensing air in working the Whitehead torpedo, and an engine for the electric light apparatus. Admiral Fellows had such ships as these in his mind when, speaking before a committee of the Admiralty, he said: 'Men-of-war now are nothing more nor less than floating machines; there are the steam capstans, the steam steering-gear; every portion of your guns, slides, and carriages worked by steam; there are the double bottom and the inner bottom, and everything connected with the machinery; in fact the whole ship is now a floating machine, and is more or less under the control of the chief engineer.'

In all our great naval wars, our ships had only a single weapon, the gun, and this not a very heavy one, for the highest limit of naval ordnance was the sixty-eight pounder, which indeed was looked upon as a very terrible weapon. To the guns of nowadays, the old thirty-two and sixty-eight pounders are mere pop-guns. There is the huge eighty-one-ton gun, twenty-four feet long, and six feet thick at the breech, its huge shot of fifteen hundred pounds being capable of penetrating thirty inches of armour. There is the thirty-eight-ton gun, whose shot of six or seven hundred pounds weight has smashed a thirteen-inch plate at a thousand yards. Then there are guns of six-and-a-half, nine, twelve, eighteen, and twenty-five tons, with projectiles weighing from one to six hundred pounds, all of them capable of piercing armour, against which the old naval guns would be as useless as a schoolboy's squirt. But the gun does not stand alone. There are two other weapons, either of which is more terrible, and in certain cases more effective than the heaviest gun afloat. These are the ram and the torpedo, the latter of which has recently been described in these columns. Let us, however, have a look at the ram. In the old days, the ship herself had no attacking power. She fought with her guns; or else she was laid alongside of her enemy, and the crew with axe, pike, and cutlass clambered over the bulwarks and on to the hostile decks, which they cleared by hand-to-hand fighting. Probably no iron-clad will ever be laid alongside of another to board her. Were an iron-clad to go into action, all the openings in the deck would be closed, and every one, even the steersman, under cover. Many modern ships could continue a fight successfully with a hundred or a hundred and fifty boarders in possession of the upper deck; and their own turret guns, or the fire of friendly ships, would clear away the intruders if necessary. Thus, in the recent war between Paraguay and Brazil, during one of the river engagements, a Paraguayan ship ran alongside of a Brazilian turret-ship and sent a crowd of boarders on to her iron decks. They met with no opposition; the round turret in front of them continued its fire against a Paraguayan monitor; while another Brazilian monitor sent volley after volley of grape-shot sweeping across the decks of her consort. In a few minutes they were clear. The Paraguayan boarders had been killed, had jumped into the water, or had escaped to one of their own ships. This, we believe, is the only attempt on record at boarding an iron-clad; its failure shews how hopeless such an enterprise is against

a ship the possession of whose deck does not give any control over her movements or those of her crew. It is therefore probable that it will be only in the most exceptional cases that iron-clads will approach each other with the object of boarding. If they do come to close quarters, it will be only to use the ram.

This idea of fighting with the ram is a very old one. The *beak* was the weapon of the ancient navies of the Mediterranean, and the beak was what we now call the ram. It is quite evident that to make the ship herself, weighing from nine to twelve thousand tons, take the place of the projectile, by driving her at a high speed against a hostile vessel, is to use a weapon more powerful than the heaviest gun. A ship like the *Inflexible* or the *Sultan*, with a speed of ten or twelve knots an hour, will strike a heavier blow than a shot from even the eighty-one-ton gun would give at a range of a few hundred yards; and while the injury done by the shot will probably be above the water-line, the ram will cut the hostile vessel down from above the water-line perhaps almost to the keel. Every one remembers how the *Iron Duke* sank the *Vanguard* by an accidental collision at a low rate of speed. But in this case the injury was such that the *Vanguard* did not sink for nearly an hour. Much more terrible was the sinking of the iron-clad *Re d'Italia* in the battle of Lissa in 1866. The Austrian admiral found himself inferior in gun-power to the Italian ships; he therefore decided on using the ram as much as possible. 'I rammed away at everything I saw painted gray,' he said himself in describing the action. One of these gray ships was the splendid iron-clad *Re d'Italia*, which struck fair amidships by Tegethoff's bow, went to the bottom of the Adriatic with all her crew in less than a minute. We believe that this use of the ram will play a great part in any future English naval engagement.

Such are the means of defence and attack possessed by our fleet. There has never yet been anything like a grand engagement between two great iron-clad navies; when that takes place, we shall see what the new naval warfare really is; meanwhile one thing is quite certain—that iron-clads are neither as handy nor as comfortable as the grand old ships of say forty years ago. Sailors in the royal navy have had to exchange the well-lighted, airy lower-decks of the line-of-battle ship for the hot dark 'compartments' of the iron-clad; for oil-lamps, hot rooms, and artificial ventilation, and perhaps the prospect of being battered with monster guns or blown up with torpedoes. This change of conditions may have serious consequences, not contemplated by designers of iron-clads. At present the crews of these vessels have been nearly all engaged as boys, put on board training-ships. They turn out a fine set of young men, but they do not remain in the service. Before they are thirty, most of them have gone, and are engaged in employment on shore, or in yachts, or in ocean steam lines. We believe there will be also a growing difficulty in procuring a good set of officers, including surgeons, for the iron-clads. Young men of good education, with numerous openings for them in civil life, do not like to be immured in dark floating hulks, with the risk at any moment of being helplessly sent to the bottom of the sea. We at any rate know the fact of two young men trained as surgeons for

the royal navy who on these grounds have shrunk from following their intended profession. In short, science may invent ships of overpowering destructive grandeur, but it cannot invent men who will agree to live under conditions of dismal discomfort in these floating dungeons. Such, we imagine, will be found to be weak points in a navy of iron-clads. Nor can we look with indifference on the many instances of disaster in the mere working of these new-fashioned vessels. Explosions and other fatalities follow in pretty quick succession. Furnaces and steam-machinery are constantly going wrong. Shafts and bearings are going wrong. There seems to be such a complication in all departments, that one can have little confidence in matters going quite right in case of that kind of active service involved in absolute warfare. A contemplation of these several contingencies, it must be owned, is far from pleasant.

Since this article was written, news has come of a successful naval engagement which shews that our sailors are as brave and as skilful as ever they were. One day last May a rebel Peruvian iron-clad, the *Huascar*, having committed piratical acts in the Pacific, was attacked by two of our fine wooden cruisers, the *Shah* and the *Amethyst*. The two English wooden ships fairly beat the iron-clad turret-ship, which was so damaged that the rebel crew were only too glad to go into harbour and surrender to the Peruvian authorities. This is the first English action with an iron-clad; and slight as it is in itself, the fact that our ships were only wooden cruisers meant for no such severe work, gives it some importance, and makes the victory a legitimate cause for well-founded satisfaction.

THE 'SOFTIE'S' DREAM.

IN TWO CHAPTERS.—CHAPTER I.

IN the fertile valley of the river Suak, just where some years ago such consternation was created by a portion of the Dog of Allen shewing an inclination to settle for good, there stood many years since a farm-house of rather a better class than any of those in the immediate neighbourhood, or indeed in any of the adjacent villages. The house stood a little off the high-road from Castlereagh to Longhlinn, and few people who passed failed to observe its well-to-do, comfortable appearance and 'smug' haggard (steading). Its occupier, Owen Kearney, was a very hard-working sober man, who not only minded his own business, but let his neighbours' affairs alone. He was never in arrears with his rent, had his turf cut a year in advance, and got his crops down first and in earliest; so that it was not without some reason that people said he was the most comfortable farmer in the village of Glenmadda. Added to being the most industrious, Owen Kearney was (what few tenant farmers in the west of Ireland were thirty years ago) something of a speculator. He did not tie his savings up in an old stocking and hide it in the thatch of the barn or cow-house, as the majority of his neighbours who had any savings usually did; but despite the repeated warnings of Sham More Morris, the philosopher and wisecracker of the village, invested in new and improved farming implements and in horses, of which he was not unjustly considered the best judge in the County Roscommon. As he did all his business when he was perfectly sober, he seldom

had any cause to complain of his bargain; and the 'luck-penny,' instead of spending in the public-house, he made a rule of giving to the priest for the poor of the parish.

Not being in the habit of gossiping either about his own or his neighbours' affairs, no one could form any correct idea of how rich Owen Kearney really was; but it was generally known that he kept his money at the bank, as on fair and market days he went into that building with his pockets well filled and came out with them empty, and mounting his cob, rode home quietly, long before the fun or the faction fights commenced.

Not so, however, the younger of his two sons, Larry, a wild restless lad of seventeen, on whom neither the precept nor example of his father and brother seemed to have the least influence. Martin, the eldest, was steady and thoughtful like his father; but Larry, with his boisterous laugh and ready joke, dancing blue eyes and flaxen hair, never spent a minute in thinking during his life. While he worked, which was not often, he was as good as two, his father used to say; and when he took his diversion he was the divil at it, Martin used to add good-naturedly. Innumerable were the scrapes Larry got into, and mimiculous were the methods by which he managed to extricate himself. There was not a wake, wedding, or christening for miles round that he was not to be found at. No merry-gathering or fair was complete without him; and it was almost a proverb that Larry Kearney was the last to sit down wherever there was a dance, and the first to shake a shillelagh wherever there was a shindy. Of course he was his mother's favourite; such boys invariably are. She shut her eyes to his faults, supplied him with money without any questions, and being a very religious woman, or what in that part of Ireland is termed a voteen, she atoned for all his shortcomings.

There was another member of Owen Kearney's family as full of fun and mischief in her way as Larry; this was Dora Costello, the farmer's orphan niece. Little Dora, everybody called her, because, when she lost her own father and mother, and went to live with her uncle and aunt, she was a little toddling thing of three years old. At the time this story tells of she was a fine girl of seventeen, tall, finely formed, and as graceful as a willow. A fine specimen of an Irish peasant girl was Dora Costello, with her red-and-white complexion, merry changeable hazel eyes, and rich, reddish auburn hair. There was not a farmer's daughter within many a mile who could *scotch* or spin as much flax of an evening, nor one who could better milk a cow or make a roll of butter. Bright, intelligent, and good-tempered, with a tongue as ready as her fingers, and a sense of humour as rich as her brogue, Dora was a general favourite, and as a natural consequence had numerous admirers. Being by nature somewhat of a coquette, she managed to play them off one against another with an ease and grace which a London belle might have envied, keeping good friends with all, and giving none the slightest preference. But when it came to a question of marriage, it was a different thing altogether. Dora declared she was very happy with her uncle and aunt, and unceremoniously refused all the eligible young men in her own and the next village, declaring of each in turn that she would 'as soon marry Barney Athleague.'

Long ago, in almost every Irish village there was to be found hanging about the farm-houses some poor half-witted creature, called in one place an *onshe*, in others an *omadhdhaun*, and in the County Roscommon a *sofie*. They were boys without any knowledge of who their parents had been, cast as children on the charity of some village, from which they usually took their names, as Johnnie Loughlinn, and Barney Athleague. How Barney came to make his way to Glennadha no one knew, but one day when about ten years old he was seen following a hunt. Stumbling over a loose stone, he sprained his ankle, and so was thrown on the protection of the villagers. A glance at the lad's motley appearance and vacant face was sufficient to shew what he was; and as in most parts of Ireland, as in Germany, there exists amongst the peasantry a sort of superstitions regard for silly people, poor Barney found food and shelter, now from one, now from another, as indeed the *sofies* invariably did; in return for which they ran on errands and looked after the pigs and poultry, and were always at hand in an emergency.

As a rule, the *sofie* looked a great deal bigger fool than he really was. He contrived to live and be fed, clothed and lodged without working. He made himself at home everywhere, was generally treated very well, and never by any chance treated badly. He knew everybody's business (for curiosity was one of his virtues or vices), and with the special advantage that people thought he knew nothing at all. All sorts of matters were discussed freely round the hearth in his presence, he meantime staring into the fire, sucking his fingers, or rolling on the floor with the dog, no more heeded than that animal; yet all the while drinking in the conversation, and with a sort of crooked wisdom treasuring it up. Animal tastes and instincts were generally the most marked in the *sofie*; as a rule, he was greedy, selfish, and uncleanly in his habits, violent in his antipathies, yet with a capacity for attaching himself with a strong dog-like fidelity and affection to a friend.

Such was Barney Athleague—perhaps a trifle better and more intelligent than the generality of his class; and there was no place in the village where he spent so much of his time, or was so well treated, as at Owen Kearney's; first, because they were naturally kindly people; and next, Mrs Kearney's religious feelings made her especially good to the poor and friendless; and there was no person in the whole world whom the *sofie* cared so much about as Dora. Wherever she went, Barney was not far behind. He was always ready to do anything in the world she asked him, no matter how wearisome or hazardous. When she was a child, he climbed the highest trees to get her birds' nests, tumbled like a spaniel into the river to get her lilies, and walked miles and miles to recover a pet kid of hers which had gone astray. As she grew older, he carried her cans when she went milking, fed her poultry, and in short waited on her and followed her about like a lapdog. It was great fun to the 'boys' who used to assemble in the farmer's kitchen of a winter's evening to tell stories and gossip, to see Barney fly into a furious passion if any one he did not like touched Dora, or even put his hand upon her dress.

One of the persons the poor *sofie* most cordially detested was Larry Kearney; perhaps because the young man was too fond of teasing him, or else too

much given to sitting beside Dora. How or whatever the cause, the poor fool hated him; but with a prudence which one would hardly have expected in a sofie, he kept his opinions to himself, and watched his enemy like a lynx. Not once or twice he saw the young man descend from the loft where he slept with Luke the 'help,' after the family were sound asleep, and opening the door, steal noiselessly from the house; and after much consideration, Barney at last made up his mind to follow him and learn his destination, nothing doubting but it was the village public-house or *shabben*, or the forge, which was often a haunt for the idlers to play cards and get tipsy in. But Larry took the very opposite direction from what the sofie imagined. Crossing two or three fields, he skirted a plantation of ash, on the other side of which was a *rath* or *forth*, said to be haunted, and the resort of 'the good people.' The place was very generally avoided after nightfall; and Barney's courage was beginning to fail him, when Larry was joined by three or four other young men, which revived his spirits, and nerve him to follow silently and cautiously as a cat.

On rounding the hill he saw there were between thirty and forty persons assembled in a field, and after a few minutes one of them advanced to meet Larry. The sofie, on seeing the man approach, concealed himself behind the ferns and brambles, all his curiosity aroused, and strained his ears to catch the conversation; but the men spoke so indistinctly that he could not distinguish a word till after a little while they drew nearer to his cover.

'Look here, Larry,' one said, drawing something which gleamed in the moonlight from a cave or hollow in the hill-side, within arm's length of Barney's crouching form. 'Look, me boy, there's twoscore pike-heads lying snug enough in there.'

'Good captain,' Larry replied, with his merry laugh, 'an' there's two-score "boys" ready to handle them.'

'Yes; but we want more,' the captain said, as he replaced the weapon in the cave, and carefully drew the thick grass, ferns, and blackberry bushes over it. 'Did you speak e'er a word to Martin?'

Larry laughed again. 'Sorra a word, captain; an' if "Molly" herself was to go an' ax him, he wouldn't join us,' he said; 'an' bedad, maybe he might inform!' he added merrily—and the men moved away.

'Ha, ha!' Barney said to himself as he crept from his hiding-place, and made his way back to the farm-house; 'that's where Larry goes. An' who's Molly, who's Molly? I'll ask Miss Dora to-morrow who's Molly;' and with this reflection he crept into his bed and fell asleep.

CHAPTER II.

'Father, I think I'd like to join the Volunteers,' said Martin Kearney one day, about a month after the above event; 'the country is in a bad way, an' it's time for them that love peace and quietness to spake up.'

'True for you, Martin; an' if I was younger I'd do the same thing,' Owen Kearney said, looking up from the newspaper, in which he was reading an account of the arrest of several of the rebels known in 184—as the *Molly Maguires*, from their having first met in the house of a woman of that name. 'It's bad for the poor boys that went with the "Mollies,"'

'Will you join with me, Larry?' Martin asked. But he shook his head, as he replied somewhat hastily: 'Not I, faith; the "boys" never did any thing to me.'

'An' I'm not going to do anything to them,' answered Martin quietly. 'Only, I think it's right for us to shew that we're honest Roscommon boys, an' have nothing to do with villains who go round the country at night frightening women an' children, an' murdering poor innocent cattle, not to mention shooting their next-door neighbour from behind a hedge, without any reason. I know I'd liever be a sheep-stealer than a Molly Maguire; an' to shew I have no dealings with them, I'll go to-morrow to Boyle an' list in the Volunteers.'

Larry used every argument to prevent his brother going to Boyle as he said, but without any avail; and early the next morning Martin started to do what numbers of the better class of farmers' sons in the vicinity of the small towns had already done.

About twelve o'clock on the night that Martin left his home, Owen Kearney and his wife were startled out of their sleep by the sofie rushing into their room screaming wildly that he had a dream.

'An' what was it, Barney?' asked Mrs Kearney kindly. 'Don't be frightened now; but tell me.'

'Arrah, ma'am,' he sobbed, 'I dreamed I saw Martin; an' two men with their faces blackened rode up to him on the plains of Boyle an' shot him. Oh, *veirra, veirra*, one of them was Larry!'

Poor Mrs Kearney fell to wringing her hands, and sobbing wildly at the extraordinary dream of the poor fool; while her husband rushed to his son's room in the hope of finding Larry; but his bed was empty, as was that of Luke the servant. Full of terrible forebodings, the farmer began to question Barney more particularly as to his dream; but he could only repeat again and again that two men fired at Martin on the plains of Boyle; one of them was Larry, the other was Luke: this he maintained with a persistency which it was almost impossible to doubt. No one thought of returning to bed; and while they were consulting as to what was best to be done, the sofie again uttered a wild shriek, and rolled over on the floor, as a bullet entered the kitchen window and lodged in the opposite wall, followed by another, which whizzed past Owen Kearney's head.

'The Lord have mercy upon us!' he exclaimed, crossing himself devoutly. 'Where will it end? And he held his wife, who was almost insensible from the fright, close in his arms. At that instant a bright light illuminated the whole kitchen; and in a moment the truth flashed across his brain—his steading was in flames. Not daring to open his door to look out, he tried to think what was best to be done; for perhaps the house over his head was blazing too, or would be in a few minutes. Casting a hasty glance round, he lifted his wife in his arms, meaning to carry her to the front of the house and out of sight of the flames; when a violent knocking at the door startled him, and he recognised his niece's voice demanding admittance. Hastily unbarring it, he saw her accompanied by a party of soldiers, who, when they found no lives had been taken, set to work bravely to protect the property which was yet untouched by the fire. But there was little left for them to do. The cattle had been hamstrung, the horses stolen, and a lighted brand placed in every stack of oats and

the thatch of every outhouse. The work of devastation had been done only too well.

'They're taken, uncle—them that set the haggard a-fire,' said Dora as soon as she was able to speak. 'I brought the soldiers to the house; and,' she added, 'one of the villains said he had finished off Owen Kearney. Thank God, it is not true!' and she threw herself into his arms.

'Yes; I heard him,' said one of the soldiers; and we've sent him to safer lodgings than we took him from. It seems, Mr Kearney, that your niece was returning home from a visit to a neighbour's, when she heard two men whispering in the lane at the end of the meadow. As they were in front, and she didn't like their looks, she kept behind, and heard them say that there were two gone to Boyle to look out for the *Volunteer*, and that they were going to do for old Kearney and his wife, "string" the cattle and fire the haggard. Like a sensible girl, she turned round quickly and ran as quick as she could towards Castlereagh. By good luck she met us half-way; and though we were going on another errand, we turned back at once with her, and netted the rascals who did this pretty piece of business.—I sent six men on towards Boyle, to see if they could learn anything of the villains that followed your son,' added the sergeant.

'Where's Larry, uncle?' asked Dora, after she had tried ineffectually to console her aunt. 'Why isn't he here?'

'You're all I have now, *alanna*,' Kearney said, pressing her to his breast. 'Martin is gone, and Larry is gone. Well, well, God is good.'

'Miss Dora, Miss Dora!' cried Barney Athleague faintly, 'come here a minute.'

In the general confusion, every one had forgotten the poor *sottie*, who lay on the floor quite insensible.

'What is it, Barney? Are ye hurt?' inquired Dora, bending over him.

'Not much; only my back is bad, and I can't lift my legs. Tell your uncle Owen Kearney that Martin isn't dead. He's lyin' on the settle in a shebeen with his hand on his side, calling "Dora, Dora!" I see him—sure I see him; and Larry an' Luke is took; the sogers is bringing them to Roscommon. Oh, wirra, wirra!'

'Shure the poor creature is frightened to death's door,' said Owen Kearney, trying to induce Barney to get up and drink a little water; but the mug fell out of the farmer's hands in dismay and horror, for he found the poor *sottie* was bathed in blood. 'He's shot, he's shot!' he exclaimed; and one of the soldiers drew near and examined the wound.

'There's a bullet in his back,' the man said; 'and he'll never eat another bit of this world's bread. And may God forget the man that forgot he was an *omadhaun*.'

Poor Barney never spoke again. Nothing could have saved his life. But his dream was literally true. At the very moment he awoke screaming, Martin Kearney was fired at by his brother Larry and his father's servant; at the hour he mentioned were the murderers taken; and Martin himself was taken into a shebeen, as he said, and laid upon a settle in the kitchen, where he called untiringly for his cousin Dora.

Such was the *sottie's* dream; and such sad stories as that above related are a part and parcel of every Irish rebellion. Martin Kearney did not

die; and Larry pleaded guilty, declaring that he was forced to attempt his brother's life both by solemn oath of obedience and by lot; at the same time confessing all he knew of the strength and doings of the *Mollies*, assuring his judges that he joined them in ignorance, and now thought of them only with horror and regret. Therefore, in consideration of his youth, repentance, and valuable information he gave with regard to the rebels, his life was spared, and he was instead sentenced to twenty-one years' penal servitude; while his companion, Luke Murphy, was hanged. It would have been almost a kindness to Larry to have been permitted to share the same fate. Before two years he died of a broken heart.

Owen Kearney's house was not burned; but after his son's transportation, nothing could induce him to live in it. He therefore sold his furniture and such of his stock as the cruelty and violence of the *Mollies* spared, and went to end his days amongst his wife's relations in the County Galway. Dora and Martin were married, and after some time emigrated, and spent the remainder of their days in comfort and happiness, clouded only by the memory of how much pleasanter it would have been if they could have settled down in the old farm-house dear to them both, to be a comfort to their father and mother in their old age, and at last to sleep beside them in Glenmadda churchyard.

The stock of one of the wealthiest gentlemen in the County Roscommon now graze where Owen Kearney's house once stood. Not a trace of his family remains in the Green Isle. Their tragical history is almost forgotten; but amongst the gossips and old women the *sottie's* dream is still remembered.

GLIMPSE OF THE INDIAN FAMINE.

ON this dismal subject so much has lately appeared in the newspapers that we almost shrink from troubling our readers with it. Everybody knows the cause of the famine—a long and unhappy drought in Southern India which parched up the land; nothing would grow; the people, millions in number, had saved nothing; their means of livelihood were gone; and with a weakness which we can scarcely understand, they sat down to die—of starvation. In times when India was subject to Mongol rulers, the population, on the occurrence of such a catastrophe, would simply have been left to die outright. Famine, like war, was deemed a legitimate means for reducing a redundancy in the number of inhabitants, and was accepted as a thing quite natural and reasonable. Matters are now considerably changed. India is part of the great British empire, and British rule is no doubt a fine thing to be boasted of. It gives the English an immense lift in the way of national prestige. Along with prestige, however, come responsibilities that are occasionally found to be rather serious. The bulk of the people of India are living from hand to mouth. If their crops fail, it is all over with them. Then is heard the distant wail of famine from fellow-subjects, which it is impossible to neglect. Noble subscriptions follow, although subscriptions of one sort or

other come upon us annually in regular succession from January to December. But when was the Englishman's purse shut while the cry of distress was loudly pealing around him?

There is much satisfaction in knowing that more than half a million sterling has been gathered for the assuagement of the Indian famine. Although vast numbers perished of hunger, vast numbers were saved by a well-conducted system of dispensing food suitable to the simple wants of the people. The natives of Southern India live chiefly on rice, and a little serves them. The distribution of rice was accordingly a ready and easy method of succouring the poor famishing families. Along with boiled rice there was usually given a cup of water, rendered palatable by some sharp condiment, such as pepper or chillies. This desire for hot-tasting condiments seems to be an inherent necessity in warm climates, for which Nature has made the most beneficent provision. With these few preliminary remarks, we proceed to offer some extracts from the letters of a young medical gentleman connected with the army at Madras, descriptive of the plans adopted to feed the assembled crowds who flocked to large camps or barnack-yards in a state of pitiable suffering. The letters were no way designed for publication, a circumstance which gives them additional value.

'**MADRAS, July 25, 1877.**—There is not much news this week. One day I drove out to one of the Relief Camps beyond Palaveram to see it. A most curious and interesting sight it was. We went at half-past five, which was feeding-time; and there we saw nine thousand five hundred starving wretches all seated on their hunkers [crouched down in a sitting attitude on their heels], awaiting their food. What a motley crew and queer mixture of old men with more than a foot in the grave; strong men and young women and unweaned babes all mixed indiscriminately, but all seated in long rows of about a hundred each, in perfect order, and kept so by not more than a dozen native police with two half-caste inspectors. The majority of the people were Pariahs. Few caste people care to come to the camps, and prefer to die rather than have their food cooked for them by non-caste persons. However, there were some—about two hundred in all—Hindus and Mohanmedans, and they were set apart from the Pariahs.

'The food, rice, is cooked in enormous chatties, and then spread out on matting to cool; after which it is put into gigantic tubs, which are carried along on bamboos by a couple of coolies to the people, and a large tin measureful given to each. A measureful of pepper water (a mixture of chillies and water) is also given to each, and as much drinking-water as they like.

'So much for the food; now for the camp itself. It is situated on a large plain, and the inclosure is about a mile round. It is in the form of a square, three sides consisting of chuppers [a kind of wood and matting tents], roofed in, and protected from the

wind on one side, being open on the other. Each of the three chuppers or houses of accommodation is built of the very simplest material: the floor is hardened mud, perfectly smooth and comfortable, as you know the people make it; while the roof consists of leaves matted together, supported on bamboos, and the side of matting. Each chupper is about a quarter of a mile long, and has accommodation for no end of people, the evils of overcrowding being avoided by the almost free exposure to the air. To windward is the Hospital, a good building, rain-proof, and covered in on all sides. Still further away are cholera and small-pox hospitals. The people at the camps receive two meals a day of rice and pepper water; and once a week on Sundays they get mutton. At this camp alone not less than fifty bags of rice were cooked and consumed daily, sometimes much more. The camp is open to all comers, and each is provided with a cloth and residence. The people appear all to be contented and happy, and await their turn for food calmly and patiently. The feeding is proceeded with rapidly now; but when first the famine came, it was not so; and owing to the paucity of servants, the feeding used to last from five P.M. till five the next morning. Rather trying for starving people to wait that time; hard too on the servants. Now, thanks to good administration, the feeding is all finished in about three hours. I was struck on the whole with the aspect of the people; they all with few exceptions looked well and in good condition. However, the Inspector said, had I seen them when they first came, it was different, and that if they were to return to their own villages, they would be dead in a few days. In fact, all the villages round are empty. Rice has now reached the appalling price of three and a half measures for the rupee, and of course one has to pay all one's servants extra. The poor cannot live, and they say the famine is getting worse! Only one man did I see who was lying among the others. Poor fellow! he had just managed to crawl into camp, and he was dying. I ordered him to be removed to the Hospital, a living skeleton.

'The Hospital was truly a sad sight, the saddest I ever saw. There in one ward, lying on the floor, were a dozen beings, literally living skeletons, with sunken eyes, and ghastly hollow cheeks, and livid lips, with their bones almost protruding through the flesh; too ill to move, and barely able to turn their glassy, stony stare upon you. Yes, dying all from starvation, and being hourly brought nearer death by wasting diarrhoea or dysentery.

'One woman I shall never forget. She had her back to me, and her shoulder-blade stood out so fearfully that I gazed upon it in momentary expectation of its coming through the skin. So awful was it, that I felt almost tempted to take my nail and scrape it, in order to see the white of the bone. Perhaps the saddest sight of all was the lying-in ward, where a lean mother was to be seen unable from weakness to nurse the bag of bones she had given birth to; barely a child surely, with its huge head and sunken eyes and its projecting wee ribs. Poor infant, it couldn't live long.'

'August 7.—This morning I was up at five, and after my breakfast of porridge and goat's milk, was driving out to Jeramuchi Famine Relief Camp, eleven and a half miles distant. The camp is much the same as the Palaveram one I already described to you; but it is superior, and more luxurious in some ways. It is not built in the form of a square, and is all the better of that, I think. It is fenced in all round with a trim palisading, as was the other camp, sufficient to prevent the people straying at night. The chuppers are arranged on the pavilion system, right down the centre of the camp. During the day they are entirely open at both sides, therein differing from the Palaveram ones, where one side is always closed. However, at night either side can be closed, as the sides consist of pieces of matting on a wooden framework, which is hinged to the side of the roof; and during the day the sides are all put up, supported on two bamboos each.

'The children at this camp are all collected together and fed first, the grown-up people afterwards. This morning I saw five thousand children, in age from twelve to infants, mustered for breakfast. An old gentleman with great swagger played a tom-tom with a couple of sticks; it was in the shape of a kettle-drum, and they all mustered, standing up in a row. M—— and I walked down two streets of these children. They were almost all bright and happy-looking; and on being asked if they had enough to eat, they all replied in the affirmative, save one boy about twelve, who shook his head and smote his belly. Poor creature; his looks confirmed his words; there he was on two legs like walking-sticks, mere bones without an atom of muscle, on which he could hardly stand. On being asked when he came in, he said last night. Where were his father and mother? Oh, father, mother, brother, sister, and he all left village together; walked many, many miles; no food. First sister, then mother, died on the road; then brother; yesterday father; he alone being able to reach the Relief Camp.

'This tale is only a repetition of dozens of the same. He was ordered milk and port wine as extras; and I hope the poor orphan being will recover. We went over the rest of the camp; saw the men and women all sitting patiently in rows in their dreamy eastern way, silently awaiting the summons of the tom-tom after the children's breakfast was over, to call them to theirs. On coming to the Mohammedan women, about thirty in number, they all promptly stood up. One could not but be struck with their appearance, so fair-skinned, clean-looking, and handsome, compared to the Pariahs and others. They all spoke Hindustani of course, and were most polite and respectful. Despite the poorness of their attire and the absence of their jewellery, they had a refined air about them, and a superior look totally foreign to the ordinary Hindu. One young girl I was particularly struck with; she could only have been about fifteen, with most lovely eyes and perfect teeth, and such a figure. Ah! I thought, if this young woman was dressed in European clothes and was a lady, she would make a figure in London. Dressed in a sari and golden saree, with bangles and other jewellery, she would to my mind have been the realisation of my idea of an Indian princess.

'The Hospital presented the same sad scene of cases of amputation as at Palaveram; there were

more than one hundred cases of dysentery and diarrhoea. I also saw another case of a milkless mother trying to suckle her newly born handful of bones in the lying-in ward. It is a misery with such a large community that no cholera prevails. They have about twenty cases of small-pox. Leaving camp, we saw two stretchers coming in with coolies. Every morning the highways and byways are searched for three miles round; and those poor creatures who have died or are found dying, unable to come to camp, are brought in. If dead, they are at once buried about a mile away from camp; if alive, they are sent to Hospital. The famine continues very bad; and there was a great meeting in Madras at the Banqueting-hall, when it was acknowledged government could not now cope with it without extraneous aid. Accordingly a telegram was despatched to England, calling on the Lord Mayors of London, Dublin, Manchester, Liverpool, and the Lord Provosts of Edinburgh and Glasgow, to open subscription lists. I am sure it is a worthy cause. . . . In Mysore alone there have been more deaths the last three months than during the last five years. The Viceroy is said to be coming down immediately from Simla to personally inspect the state of matters.'

In a subsequent letter, October 25th, the writer adds—'The accounts are still dreadful. Many poor creatures die after reaching the camps, from inability to swallow or receive the nourishment offered to them in the hospitals. The day the Viceroy visited Bangalore, no fewer than ninety dead bodies were found in the streets and the bazaar. The people at home have certainly done much to help their poor brethren in India; but I believe they would do still more were they to be thoroughly aware of the terrible scenes which have come under my notice.'

In conclusion, it is not out of place to say that the frequently occurring famines in that country call for measures of prevention as well as temporary aid. In making roads and railways, the English have done vast service to India; but something equally imposing in the way of irrigation from artificial tanks and from rivers has seemingly become an absolute though costly necessity, for only by such means can a repetition of these dire famines be averted. In this direction evidently lies the duty of legislators, and we hope they will, with considerate foresight, be not slack in its performance. There might also, possibly, be something done by enabling masses of the redundant population to emigrate, under safe conduct, as coolies to countries where their labour is required. w. c.

A BURIED CITY.

THE history of the destruction of Herculaneum and Pompeii under the ashes of Vesuvius is well known; but long before that period, and contemporary with the age of Stone, a city in the Grecian Archipelago was buried in the same manner, with its inhabitants, their tools, and their domestic utensils. Here they have lain for thousands of years, until M. Christomanos, Professor of Chemistry at the University of Athens, called the attention of the public to them.

There is a small group of islands to the north of Candia, where these discoveries have been made, chiefly in Santorini and Therasia, which, with one

or two others form a circle round a bay. The two already mentioned are in the shape of a horseshoe, with the concavity turned inwards, rising from the bay in almost inaccessible cliffs. Horizontal strata of deep black lava, layers of reddish scoria, and cinders of violet gray, are unequally distributed over these steep rocks, the whole being covered by pumice-stone of a brilliant whiteness. A few banks of marble and schist crop out to shew the original formation over which the volcanic ashes have poured; and long vertical streams of what has been molten matter can be traced down the cliffs. On the opposite side, facing the open sea, the islands are altogether different, sloping gently down, and covered with pumice-stone, the light fragments of which are soon displaced by the wind, and sometimes carried to great distances by the equinoctial storms. A few villages are scattered about, and the vine clothes the ground with its beautiful greenery.

From time immemorial the pumice of Santorini and Therasia has been dug out for building houses; and when mixed with lime, it affords an excellent cement, acquiring such hardness that it resists shocks of earthquakes and the action of air and water. It has been used for building piers and moles along the Mediterranean; and recently the works at the Isthmus of Suez and the ports of Egypt have given a great impetus to the trade, and thus opened out the underlying soil and remains of human habitations. There are immense quarries where the stone has been worked; the material being transported to the edge of the cliff, and thrown down a *glissade* about a hundred and fifty feet high, to the side of the ships awaiting it. Contenting themselves with cutting up the highest layers only, the workmen avoided the lower part, which seemed to be mixed with stony masses. These hindered their work, and were not valuable; but upon examination they prove to be walls of ancient houses. This had no interest for the owners of the land, who had long been aware of the fact; but an accidental visit from M. Christomanos awakened the interest of scientific folks at Athens.

At first the idea arose that this was an ancient burial-ground, and that the tombs had been hollowed out of the pumice-stone after the volcanic eruption; but it is now fully ascertained that they were built long before. The largest edifice, which has been cleared of the tufa which fills it, consists of six rooms of unequal size, the largest being about eighteen feet by fifteen; and one wall extends round a court of twenty-four feet in length, with a single entrance. The walls are built in quite a different manner from the fashion now used in the islands; they are formed of a series of irregular blocks of lava, uncut, laid together without any order; no mortar, but the interstices filled with a kind of red ashes. Between the stones, long twisted branches of the olive-tree are laid, still covered with bark, but in a very advanced state of decomposition. The wood has become nearly black, as if burnt, and falls to powder at the slightest touch. The inside of the rooms has never been whitewashed; but probably a rough coating of red earthy matter, similar to that which lies between the stones, has been put on.

At the north side there are two windows; a third and a door are found on the other sides, and several openings into the different rooms. As

these were formed by pieces of wood, which have decayed, the situation of the openings is chiefly ascertained by the mass of stones that have fallen in. In every case the roof lies in the interior of the rooms, and has been formed of wood laid upon the walls in such a manner as to be sloping; whilst in the largest apartment a cylindrical block of stone buried in the floor, has evidently supported a beam of wood, from which radiated the other pieces of the roof.

The things which have been discovered in this building are numerous and varied. There are vases of pottery and lava, seeds, straw, the bones of animals, tools of flint and lava, and a human skeleton. It may be remarked that not one article of iron or bronze has been found, not even the trace of a nail in the pieces of wood which have formed the roof; the absence of metals is complete. The pottery is all well proportioned, the commonest kind consisting of yellow jars, very thick and capable of holding many gallons. They are filled with barley, the seeds of coriander and aniseed, gray peas, and other articles which cannot be made out. The form, material, and size resemble the jars used in Greece for keeping cereals in very early though historic times. In many of the rooms, heaps of barley lie against the walls. There are smaller jars of finer ware and a brighter colour, ornamented with circular bands and vertical stripes. The colouring-matter, of a deep red, has been put on in a moist state without variety of design, being always in circles and straight lines.

Besides a double necklace and ear-rings of a woman, many articles made of obsidian, a volcanic product sometimes called volcanic glass, have been found in Therasia. These are cut, but not polished; some of a triangular form have probably been the points of arrows; others are like small knives or scrapers for preparing skins. The use of obsidian appears to have been common during the Stone age among those nations who lived in volcanic regions, and even in later periods. It is said that it is still used by the women of Peru for scissors. It was more generally in vogue before the discovery of metals than since, particularly in Greece, where arms and tools of stone disappeared after copper was found. In the strata where they are at Therasia, there is nothing of iron or bronze.

Two small rings of gold are rather remarkable; they are so small that they would not pass over a child's finger. It may be inferred that they were links of a necklace. In each there is a hole about the size of a needle's eye. Probably they had been threaded one after another on the same string, and not interlaced like the rings of a chain. The interior is hollow; and no indication of soldering can be perceived, neither does the gold seem to have any alloy of other metal. The maker had flattened the bit of native gold by hammering it to the state of a thin circular leaf, and then folding it up with the edges to the inside of the ring. As gold has never been found in Santorini or in any of the neighbouring volcanic islands, it proves that the inhabitants held communication with the continent; certain streams of Asia Minor having been celebrated in antiquity for the great quantity of gold brought down.

Geologists have endeavoured to draw out the history of the terrible event which overwhelmed

these islands and their inhabitants. At the beginning of the tertiary period, Greece, united to Africa, seems to have formed part of a large marshy continent, where now flows the Mediterranean. It was inhabited by those gigantic mammals whose bones have been largely found in Africa. Towards the close of this epoch a lowering of the land separated Europe from Africa, and gave to the Mediterranean its present configuration. An oscillation of the crust of the earth afterwards produced openings, through which igneous matter has flowed. Torrents of lava gave birth to the volcanic rocks which are to be found in Greece and the neighbouring islands, and a volcano had evidently opened in the present bay of Santorini. The hill Saint Elias, the top of which forms the culminating point of the island, was then an island composed of schist and marble. The igneous matter, cooled by contact with the water and the atmosphere, attached itself to this hill, and the whole united together, formed the space now occupied by Santorini, Therasia, and Aspronisi. Repeated layers of lava, scoria, and ashes collected during many ages when the crater which occupied the central part was gradually becoming undermined.

Volcanoes are the weak parts of the earth's crust; there is not one in full activity which does not present alternative series of increase or lessening. The cone rises gradually until by degrees it is obstructed with lava, then a sudden fall destroys it and hollows a new crater, sometimes larger and deeper than the first. Many such occurrences have been described, but none can equal in importance the gigantic fall which formed the Bay of Santorini. All the central part must have given way, and been suddenly engulfed, leaving but a narrow border of land, through the northern part of which the sea has dashed to fill up the hollow. Instead of a mountain three thousand feet high, there is a bay of immense depth, surrounded by precipitous rocks, close to which ships can anchor.

This violent catastrophe must have taken place when man was on the island; and the event must have been sudden, since the remains prove that there was no time to move away or to displace anything in the houses. The eruption of pumice-stone has preceded the sinking of the cone, for the tufa which covers the downs is cut through by subadjacent streams of lava; nor does it seem to have been preceded by any violent earthquakes, as in that case the houses found in Therasia would have been demolished and the walls no longer standing. This is remarkable, as the construction of the buildings proves that the island was subject to them; the pieces of wood inserted in the walls seeming to be for no other object than to prevent the disastrous effects of such a shaking. This custom is still in use among all the islands of the Archipelago.

From the abundance of wood used in the houses, the island must in those days have been well supplied with timber. The olive-tree grew freely, and barley was the commonest of the cereals. Probably too the climate was different. The vine does not seem to have been there; still less was it the only plant cultivated, as now, at Santorini. The population were husbandmen, understanding how to grind barley in mills and make it into bread; how to press oil from olives, to bring up cattle, and to weave stuffs. Yet the great

abundance of utensils of lava, obsidian, and flint, without any metals, shews that theirs was the age of stone, when the use of metals was unknown. The blocks of stones at the angles of the house at Therasia and the column standing near, indicate considerable skill in the workmen, when the kind of tools they used is taken into consideration; whilst the vases of pottery-ware are remarkable for their elegance of form.

It only remains to consider how many years ago it is since this great eruption took place. The data are vague, but geologists have tried to make some approximation. It is well known that after any violent catastrophe the subterranean forces seem to be exhausted; the periods of repose in a volcano are proportional to the previous energy. About one hundred and ninety-six years before Christ there is the record of an eruption, which raised in the centre of the bay a small islet called *Palæa Kameni*. After the Christian era, frequent slight emissions only served to increase the size of the island, and during the middle ages there was a period of calm. In the fifteenth century the excitement again burst forth, raising reefs both inside and outside the bay. The second duration of rest was about ten centuries; so that to the first, according to its intensity, there may be calculated at least twice that time; thus the formation of the bay was perhaps two thousand years *n.c.*

Historical records furnish more positive teaching, as the bay certainly existed fifteen hundred years *n.c.* It was at this epoch that the islands of the Greek Archipelago were invaded by the Phœnicians. This nation occupied Therasia and Santorini, as the many ruins still to be found testify, and they are built on the top of the pumice-stone. But the great eruption must have been long before that, since thick beds of pebbles and shells, from fifteen to twenty yards deep, lie on the tufa; and geologists know well, from the habitual slowness of this raising of the soil, that it corresponds to many centuries. There was also a population on the islands differing from those who were buried in the ashes, and from the Phœnicians. The latter knew the use of bronze, and introduced it on all the shores of the Mediterranean. Most likely we may place the great event during the early days of Egyptian civilisation, which some historians compute to be four or five thousand years ago. The primitive population present no trace of the influence which that nation exerted, and with which commerce would have placed them in frequent relations.

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THE HIDDEN BOX.

A TALE OF THE COVENANTERS.

SOMETHING like two centuries ago, while the persecution against the Covenanters was raging in Scotland, many were forced, for conscience' sake, to give up all and retire to out-of-the-way places, to be out of the reach of their enemies. Among others, a well-to-do farmer of the name of MacWilliam, reduced to penury by the fines imposed upon him and the confiscation of his lands, withdrew from the home of his youth; and having rented a moorland farm in a remote parish of a neighbouring county, he settled down there with his wife and family. Hillfoot—for such was the name of the farm—lay in a hollow between two hills of moderate elevation, which rose with a gentle slope on each side. A burn ran through the farm, and about two miles farther on, joined a river of some importance. Almost at the confluence of the two the glen took a sharp turn to the left, and thus rendered Hillfoot invisible from the main road, which followed the course of the larger stream.

Though the farm was of considerable extent, little more than a living for the family could be made about it, for heather was more abundant on the hills than grass; and good arable land was out of the question, for the district was so late that cereals could barely ripen, and even the meadows along the holms by the burn-side yielded but scanty crops. It was in this place, however, that James MacWilliam had elected to spend his latter days. All around the house the outlook was no doubt bleak and bare and far from encouraging; but all that he loved most dearly were with him, and if he had not the comfort and luxury of former days, he had what he prized more than all earthly things—freedom to worship God in the way it seemed best to himself. At the time of his removal to Hillfoot he was about forty years of age, and his wife two or three years his junior. They had been married some fifteen years, and two children—a son and daughter—

had blessed their union. John, a lad of fourteen, assisted his father in the tending of their flocks and in the working of the farm; while their daughter Barbara, two years younger, helped her mother in the house; and although she was not strong enough yet to do the heavy work, by the sweetness of her temper and the blitheness of her nature her presence enlivened all about her and made the heavy task seem light.

Years rolled on; and though they often heard of the persecution and dreadful punishment their fellow-countrymen, nay even their fellow-parishioners were suffering, still in their remote and unsuspected retreat they were allowed to live on in peace. Ten years had passed, and with them many changes had come over Hillfoot and its inmates. Death had not left it inviolate, for the wife and mother, not strong at best, had been ill able to stand the privations and hardships which the family had endured since settling there. It was with sad hearts that her husband and family saw her pining away; and although they put forth every effort and tried every expedient that love could devise to prolong her life, she sank lower and lower; and when autumn was merging into winter, and the heather-bells were beginning to wither, she passed away. Barbara, on whose shoulders the household duties had long before this fallen, was now no longer a girl, but a comely lass of twenty-two. Her tall graceful figure, kindly manner, and sweet disposition made her beloved by all who knew her, and brought her many admirers. She had become betrothed to a young man, a shepherd on a neighbouring farm, and but for the ailing health and subsequent death of her mother, was to have been married the following summer.

John, on whom, from the decrepitude of his father, the management of the farm had now devolved, had applied himself with so much earnestness to his task, and things had so prospered in his hands, that the family were in a much better condition than they had ever been since their coming there.

Of all the neighbours they had come in

contact with, James Morton of Burnfoot-hill was the one with whom they had the most dealings. Morton's wife had been dead for many years; but his only daughter Janet, a young woman about Barbara's age, kept house for her father. At bottom, Morton was an honourable enough man, but he was grasping and worldly, and cared little for those things which his neighbour MacWilliam regarded as most sacred. Between the old folks accordingly there had been little coming and going; but Barbara and Janet were fast friends, for the two girls had forgathered among the braes shortly after the former had come to Hillfoot, and an intimacy was then formed which grew closer as they grew older, and which now rendered the two almost inseparable.

John MacWilliam had also found something of a kindred spirit in Janet, and from taking a deep interest in her welfare, he gradually awoke to the consciousness of regarding her with a true and honest affection. He had long worshipped at a distance; but now that his mother was dead, and his sister betrothed to a neighbouring swain, he determined to approach the object of his love and tell her the state of his feelings. An opportunity was not long in presenting itself. Janet came on a visit to Hillfoot one lovely June afternoon, and in the evening, as she was preparing to go home, John volunteered to accompany her. They sallied out and wended their way down the burn-side. The sun was sinking behind the hills; the sky was bright and clear and peaceful overhead, and as the shadows lengthened, a dead calm seemed to descend on all things around. Nothing was to be heard save the purling of the brook at their feet, or the bleat of the lambs far up the hillside. The quiet beauty touched the hearts of both as they tripped along, and caused them to linger by the way, that they might the longer gaze on the tranquil scene. Seating themselves on a grassy knove, with the maiden's hand clasped in his, he told in simple yet passionate language how he had long regarded her with the deepest affection and that she alone could make him happy. Need more be said? They rose to go, for the shadows were deepening; and as they sauntered down the glen hand in hand, it was agreed that he should ask her father's consent that very night.

When they entered Burnfoot-hill, Morton was much surprised to see John at such an unusual hour; and when he learned his errand, was not overpleased, for he had calculated that his daughter, of whom he was justly proud, would make a better match, since he was rich, and she being his only child, was the heiress-apparent to all his possessions. Accordingly, he would give his consent only on two conditions, and these were, that John should buy Hillfoot and portion it to his daughter! When John heard these conditions, his heart died within him; and he parted that night from Janet like a man in a dream; and, despairing of ever being able to fulfil the conditions, he retraced his steps up the glen with a heavier heart and less elastic step than when an hour or two before he had come down. When he reached home, he knelt by his bedside and prayed to the Father of all mercies for help to enable him to bear up with his trouble.

Throughout the long night he pondered and racked his brain for some expedient whereby he

might raise the necessary funds and remove the only obstacle between himself and his happiness, and carry Janet home in triumph—his reward and joy. The day dawned; and as he prepared to go forth to his first duty in the morning, that of looking after the sheep, he felt as if there was no life in him—as if there was nothing to live for now. But the old adage says truly—the darkest hour is just before the dawn. Seizing his staff, he stalked forth and began to ascend the hill. He had hardly reached the top when he saw right in front of him a man looking carefully amongst the heather as if for something he had lost. He appeared to be a stranger to the place; and his dress shewed him to be no shepherd; and John, surprised that such a person should be there at so early an hour, went forward and accosted him. The stranger started when he heard a voice, for he had not noticed any one approaching, but answered cheerily the 'Good-morrow' addressed to him. At first he regarded his interrogator with some suspicion; but the frank open countenance of the latter soon dispelled all doubt; and when John asked whether he had lost anything, the stranger proceeded to tell him the following story.

He began: 'I am a captain in the Scottish army; and the other day while sitting in my house in Edinburgh I received a message to come to the Tolbooth jail, as an old friend desired very particularly to see me. Wondering who this friend in the Tolbooth could be, I set out, and having arrived there you can judge of my surprise when I recognised in the prisoner before me an old comrade and fellow-officer, Bertram by name. We had served together under Leslie, and had been fast friends. After some years, Captain Bertram left his regiment and went up to London. What he went for I could never learn, but I lost sight of him from that time, until he sent for me to come to the Tolbooth. His history he told me had been an eventful one; and he had passed through much since I had seen him last. Amongst other things, he had allied himself with the ringleaders in the Rye-house Plot; and when that conspiracy had become known to the government, my friend the captain fled with all haste from London and made the best of his way to Scotland. Though he had made many narrow escapes, he got across the Border safe enough, and was congratulating himself on having at last reached a haven of safety, when he learned to his surprise that the limbs of the law were still on his track, and that even there he was not safe. He hurried north as fast as possible, thinking to find refuge in the Highland glens; but his pursuers had been gaining on him, and as he was traversing this part of the country—I take it to be on the top of this very hill—he saw his pursuers, a party of red-coats, come over the top of yonder hill on the other side of the valley. He had carried with him from England a small box of extremely valuable jewellery, by selling which he would have as much as keep him in his old age and forced retirement. But when he saw the soldiers so close on him, he hid the box in a tuft of heather, so that if he were taken it might not fall into the hands of his enemies; and if he did escape he might have an opportunity of coming back and recovering it. He was, however, captured before he reached Glasgow, which I believe is not more than twelve miles from here; thence he was taken to Edinburgh and confined

in the Telbooth, where I saw him. I interested myself in his case, and used all my influence to get him set free; but the evidence of his guilt was too decided to admit of a doubt, and the government was in an forgiving mood. He was tried, condemned, and has been executed. The night before his execution he sent for me and described the place where he had left his box of valuables, and asked me to go and search for them and take the use of them. From the description I got of the hill, I think this must be the one, and my errand here this morning is to find this lost treasure.'

When he had finished his story, John immediately volunteered to help him in his search for the box; and the stranger being nothing loath, the two started to look, and continued the search until the sun had mounted high in the heavens. The stranger, unused to the rough and uneven ground of the hill, was completely knocked up, and determined to give up the search as useless, remarking that it reminded him of looking for a needle in a haystack. After being pressed to go down and partake of some refreshments—which, however, the stranger declined—and as they were on the point of parting, John asked him to leave his address, so that if he did find the box, he would be able to let him know. The stranger did so, and promised a handsome reward if the box was found and brought to Edinburgh. They parted, the stranger to make the best of his way to the village, which lay some four miles off, and thence take horse to Glasgow; John to go his rounds amongst the sheep, which had been neglected while the search was going on.

Whilst he was thus occupied, he kept turning over in his mind what had passed between the stranger and himself, and it suddenly occurred to him that there was an opportunity of raising at least a little money, for should he find the box, the stranger had promised a handsome reward. At the thought, a wild, tumultuous joy filled his breast, and he eagerly hastened to finish his round and get back home, so that when he had breakfasted he might renew the search. He was, however, so far behind his usual time of arrival that he found his kinsfolk in consternation at his protracted stay. Fearing some accident had befallen his son, the old man was on the point of going out to seek for him when he made his appearance. John told them the cause of his delay; and also declared his intention of going out to continue the search as soon as he had satisfied his hunger.

The story told by her brother made a great impression on Barbara, and she, after sitting wrapt in thought for a few minutes, exclaimed: 'It *must* have been him!' Her brother in surprise asked what she meant; and then she told how, one afternoon two or three months before, she had wandered up the burn-side with her seam in her hand, and had seen a man running along the hill as fast as the nature of the ground would permit; and as he ran she saw him halt, and as it were bend down amongst the heather, and then start off to run again. She stood and watched him till he went out of sight, thinking it was perhaps some poor Covenanter chased by 'Kirke's Lambs,' who at that time were the terror of the country; but having watched some time longer, and seeing no one in pursuit, she concluded it would simply be a shepherd on some errand of despatch, and

thought no more about it. Her brother's recital, however, had brought the circumstance to her memory; and laying the two things together, she inferred that it must have been Captain Bertram she had seen, and that when she saw him stoop, he had concealed the box of valuables.

When John heard his sister's story, he eagerly questioned her whether she could trace the man's course along the hill or point out the place where she had seen him stoop. Barbara was uncertain, but volunteered to accompany her brother and indicate, so far as she could remember, the spot he was so anxious to find. Hurriedly partaking of the food his sister had prepared for him, in a very few minutes the two issued forth to begin the search. They agreed that it would be better to go to the place where she had been standing when she saw the fugitive, so that she might have a better idea of where to look. They accordingly held their way up the valley, and as they were going he told her all that had passed the night before, and explained how it was that he was so eager to fall in with the concealed treasure. She, with all the ready sympathy of a sister, entered into his spirit; and when they had reached the place where she thought she had been standing, she proposed that he should go up the hill, and in that way she might be more able to tell definitely at what distance the man had been out. The suggestion seemed good, and was immediately carried out; and at the distance of nearly half a mile from where she was standing, she signalled him to stop. She immediately ascended, and as soon as she had reached him the search began in earnest. Sticking his staff in the ground where he had been standing, he hung his plaid upon it; and then Barbara and he going out something like fifty yards, and taking different directions, each described a semicircle with the plaid as centre, meeting on the opposite side. They continued the process, narrowing the circle every round, till they had come within five yards of the plaid; but all to no purpose. The task seemed hopeless, and they were on the point of abandoning the search in the space they had inclosed with the first round, when Barbara, with a joyful cry, drew forth the box from a thick bunch of heather!

The two then hurried home to make known their good fortune to their father, and also to consult how they should let Captain Hamilton, John's friend of the morning, know that they had found the box. There were no telegraph wires in those days which could flash the news to its destination in a few minutes; nor were there even mails from so remote a place, by which letters could be carried with anything like safety or precision. The only way therefore that seemed to be advisable was that John should take the box and carry it all the way to Edinburgh and hand it over to the rightful owner. It was accordingly resolved that he should start very early next morning, which would enable him to reach Edinburgh that day, and take the box with him. To effectually conceal it, Barbara put up two pairs of blankets of her own weaving into a bundle, with the box inside; and when the east was beginning to turn gray, John set out with his bundle on his back, and some cakes and cheese in his pocket. On he trudged with a light step and lighter heart, for he felt he was on the eve of having his dearest wish fulfilled. Long before its inhabit-

ants had begun to stir, he passed through Glasgow, then an insignificant city compared with its present grandeur and prosperity. While it was still early, halting by the wayside he quenched his thirst at a neighbouring spring, and then walked on, passing many villages by the way. By mid-day he reached Falkirk, and having there done justice to his cakes and cheese, he pushed on; and as the sun was sinking in the west he reached Edinburgh, and with little difficulty sought out the address given him by his friend the captain.

He found that that gentleman lived in one of the most fashionable houses in the town; and when he knocked at the door and asked to see Captain Hamilton, the page told him in a very rough manner that his master had no time to waste on such as he. John felt nettled at this impertinence, but respectfully desired him to tell his master that the shepherd with whom he had been speaking the morning before, was at the door, and wished to see him. The page very reluctantly went; and when he delivered his message, was not a little surprised to see the alacrity with which his master obeyed the summons. The captain took John into his private room, and there eagerly asked him if he had found the box. For an answer, John quietly drew the article asked for from his bundle and handed it to the captain, who took it, and having produced the key which Bertram had given him when he told him the story, opened the box and found the contents all safe. He did not tell John what was the value of the jewels it contained; but after having been made acquainted with the mode in which the treasure had been recovered, he produced a bag containing one thousand guineas, and handed it to the faithful shepherd, as the reward of his honesty and fidelity. He at the same time pressed him to accept of his hospitality for that night; to which John readily consented, being thoroughly worn out by his long and tiresome journey. Ordering meat to be set before his guest, he waited till he had had enough, and then conducted him to a bedroom for the night.

It would hardly be possible to describe the feelings of John when he found himself alone. An overpowering sense of gratitude to his heavenly Father filled his breast, and falling on his knees, he poured forth a fervent prayer of thanksgiving for what he had received. In the munificent reward he had earned, he saw the highest aim of his ambition won, and his dearest hopes consummated. Having at length retired to rest, his thoughts kept him awake for some time; but tired Nature soon asserted herself, and he sunk into a deep and refreshing slumber, and slept until the beams of the rising sun shining into his room roused him, and warned him that it was time to be taking the road. He rose, dressed himself, and was on the point of leaving, when the butler knocked at the door and told him breakfast was laid for him in the hall. Gratefully partaking of the offered cheer, he then set forth on his journey homeward, where he arrived as the gloaming was deepening into night. His story was soon told; and when he held forth the bag of gold and declared how much it contained, and assured them that it was all his own, his sister fairly broke down and wept for very joy. John then told his father the whole story of how he had trudged to the Scottish metropolis, and what he had there found; and he in the fullness of his heart

embraced his children, and thanked God who had been so bountiful to them.

There is little more to tell. The muirland farm changed owners, and the house was repaired. James Morton was no longer opposed to the marriage of his daughter Janet with John MacWilliam, for his son-in-law elect was no longer a poor tenant farmer, but an independent laird; and before another summer had come and gone, a new mistress had begun to rule at Hillfoot, and Barbara had been wedded to her shepherd-swain. It is unnecessary to follow them further in detail; suffice it to say that John and Janet lived long and happily together, and had the pleasure of seeing their sons and daughters grow up around them; and when he died, he left Hillfoot to his eldest son, charging him neither to sell it nor to leave it. Well and faithfully has that injunction been carried out, for to this day a descendant of the MacWilliams is in possession of Hillfoot.

FIRES AND THEIR CAUSES.

THE oft-repeated words, 'Cause unknown,' appended to the daily reports of the conflagrations which occur all over the country—such as that, for instance, which lately occurred at Inveraray Castle, but which is now supposed to have been caused by lightning—furnish matter for grave reflection. A glance at the report of one of the largest fire brigades will shew us that the causes (when ascertained) are of the most varied description. It appears that the candle is the most destructive weapon to be found in an ordinary household, for conflagrations lighted by its help far outnumber those credited to any other cause. Curtains come next on the black list. The next large figures are given to 'Spark from fire,' followed by 'Pond flues.' Next in order may be noticed 'Gas,' 'Children playing with fire,' 'Tobacco-smoking,' 'Spontaneous ignition,' and lastly 'Incendiarism.'

There is no doubt that many a fire owes its origin to causes quite beyond the control of the tenant of the house in which it occurs, and that the scamping manner in which builders' work is often done is the prime cause of many a fire which is put down as unaccounted for. The ends of joists are left protruding into chimneys, or a thin hearthstone is set upon a bed of timber. In both cases the wood becomes so dry and hot that it is ready to take fire from the first spark that settles near it. Overheated flues represent a source of danger which is also attributable to the careless builder; for if the flue were so placed that its heat could not affect adjacent woodwork, it would be always as safe when hot as when cold. It is true that by act of parliament builders are obliged to preserve a certain distance between flues and timber; but surveyors cannot always reckon on their instructions being carried out, and cases are unfortunately rare nowadays where workmen will do their duty in such matters without constant supervision. Lath and plaster divisions between houses are also illegal; but buildings, and more especially warehouses, are now of such vast extent, that they really represent aggregations of small houses in which the act of parliament concerning party-walls becomes a dead-letter.

Among the ascertained causes of fire are those

which occur in the various workshops where hazardous trades are carried on. These naturally show an increase since steam-power has become such a universal aid to nearly every kind of human labour; necessitating furnaces which remain kindled for weeks or months together. Apart from this source of risk, there are numerous trades where such inflammables as turpentine, naphtha, spirits of wine, and combinations of them in the form of varnishes, are in daily use to a very large extent. The familiarity which such constant use provokes breeds a contempt which often resolves itself into a negligence almost criminal in its nature. Drying-stoves afford another dangerous item in the list of fires connected with the trades; japanners, cabinet-makers, and hosts of others using such stoves as a necessity of their business. Hot water pipes for heating purposes also represent the cause of a large number of fires, the most dangerous kind being those which are charged with water and hermetically sealed. The reason of this is easily explained. Water boils at a temperature far below that necessary to ignite woodwork; but when confined in such pipes as we have described, it will rise in temperature to an extent only measured by the strength of the material which holds it. A soft metal plug is sometimes inserted in these pipes, so that should any unusual degree of heat be approached, it will melt out, and thus relieve the pressure. Is such a good precaution is by no means universal.

The pipes which are used for carrying off heated air, and which are placed above gas-burners, are too often allowed to pass between the ceiling and the floor above without any regard to the obvious danger incurred. The various close stoves which were introduced to public notice at the time when the price of coal was suddenly doubled, although no doubt economical, are not so safe as the old form of kitchen range, which many a careful housewife has likened to a cavern. The whole of the air which rises through the flue of a closed stove actually passes through the fire, and thus attains a very exalted temperature. In the old stoves, on the other hand, the hot air is always largely diluted with that which is attracted to the chimney from all quarters. It is evident therefore that the chances of fire in the flue of the former are much greater than in that of the latter.

Theatres may be said to combine within their walls all the risks which we have as yet alluded to, for they represent factories where work of a most diversified kind is carried on, and where both open and closed fires are in constant use. At pantomime time especially, the number of persons employed in the various workshops of a large theatre is to the uninitiated quite marvellous. Carpenters and 'property-men' (those clever workmen who can make everything from a bunch of carrots to a parish pump) represent a constant source of danger from fire, in that they deal with inflammable material, and require the aid of heat for their size and glue. It is obviously important in a little kingdom where all is make-believe—where the most solid masonry is wood and canvas, where the greenest trees are dry as tinder, where even limpid streams are flimsy muslin, nay, where the moon itself is but a piece of oiled calico—that there should be no mistake about the reality of the precautions against accidental fire. In most theatres, rules are in force of the most stringent

character, extending even to such details as clearing so many times a day the accumulated shavings from the carpenters' shops. If such a sensible law were enforced in other places besides theatres, it would be a preventive measure of very great value.

Shavings are perhaps the most dangerously inflammable things to be found about a building. A block of wood is a difficult thing to set on fire; but when reduced to the form of shavings, a mere spark will turn it into a roaring fire. The same thing may be said in a minor degree of a lump of iron, which when reduced to filings can be burnt in the flame of a common candle. It is often this difference of bulk which will decide whether a material is practically inflammable or not. Paper affords another example of the same principle; tied tightly in bundles it may smoulder, while in loose sheets its inflammability is evident.

It is stated upon good authority that in one-third of the number of fires which occur the cause is not ascertained. The plan long ago adopted in New York, and which has led to a sensible diminution in the number of fires there, has not, for some reason, found favour with the authorities in this country. We allude to the custom of convening a coroner's court to inquire into the origin of every fire which takes place. There is little doubt that such inquiries would educate thoughtful householders into taking precautions which might not otherwise strike them as being at all necessary. The importance of such precautions is manifest when we learn that in London alone there are on the average three fires in every twenty-four hours. If this wholesale destruction were reported of an Eastern city, where the houses are of wood, and are sun-dried by incessant tropical heat, there would be some excuse for it. But here at home, where bricks and mortar are so common, it is certainly astonishing that fires should be so prevalent.

It would seem that it is a much easier task to set an entire house on fire, than it is with deliberate intention, and with proper combustibles, to light a stove for the purpose of boiling a kettle. This latter operation is not so simple as it appears to be, as any one may prove who has not already tried his, or her, hand at it. In fact, an efficient or bad house-servant may be almost at once detected by the ease or difficulty with which she lights her fires. The inefficient servant will place some crumpled paper in the grate, and will throw the best part of a bundle of wood on the top of it, crowning the whole with a smothering of top of coal; and will expect the fire to burn. The good servant will, on the other hand, first clear her grate, so as to insure a good draught; she will then place the wood above the paper, crossing the sticks again and again; then the coals are put in deftly one by one, affording interstices through which the flames will love to linger; a light is applied; and the kettle will soon be singing acknowledgments of the warm ardour with which it has been wooed. Contrast this with the other picture, where double the fuel is wasted, and where smoke and dirt make their appearance in lieu of tea and toast. We venture to say that a badly managed kitchen fire, with its train of unpunctual meals, leads to more general loss of temper than all the other minor domestic troubles put together. The stove is usually the

scapegoat on which the offending servant lays her incompetence (the cat clearly could establish an *alibi*); but the most perfect of ranges would not remedy the fault. The only real reason for such a state of things is the prevalence of sheer stupidity. Molly's mother was taught by Molly's grandmother to light a fire in a certain way, and Molly's descendants will, from persistence of habit, continue to light fires in that manner, be it good or evil, until the end of time. It is quite clear that the same stupidity which causes an intentional fire to fail, will occasionally lead to a pyrotechnic exhibition which has been quite unlooked for. For instance, cases are not unknown where servants have used the contents of a powder-horn for coaxing an obstinate fire to burn; the loss of a finger or two generally giving them sufficient hint not to repeat the experiment.

The general use of gas has done much to reduce the number of conflagrations, for it has replaced other illuminators far more dangerous; but it has at the same time contributed a cause of accident which before its use could not exist. So long as people will insist on looking for an escape of gas with a lighted candle, so long will their rashness be rewarded with an explosion. It is not customary, where there is a doubt as to whether a cask contains gunpowder or not, to insert a red-hot poker into the bung-hole. Yet such a proceeding would be scarcely less foolhardy than the detection of the presence of gas by means of flame. The test in both cases is most thorough, but it is too energetic in its action to be of any value but to those who wish to rise in the world too suddenly.

Drunkenness is a well-known source of burnt-out dwellings, the habitual tippler being too often left to his own devices in the matter of matches and candles. The usual faculty of double vision with which an inebriated man is gifted, leads to a divided claim upon the extinguisher, which naturally points to a disastrous sequel. Even sober people will be guilty of the most hazardous habits, such as novel-reading in bed with a candle placed near them on a chair; for novels, like some other graver compositions, are occasionally apt to induce slumber; and the first movement of the careless sleeper may imperil his life, as well as the lives of others who may be under the same roof with him.

The caprices of female dress have also often led to fatal accidents from fire, and crinoline skirts had in their day much to answer for. But at the present time petticoats seem to have shrunk in volume to the more moderate dimensions of an ordinary sack, so that we are not likely to hear of accidents from this particular cause until some fresh enormity is perpetrated in the name of fashion. We may mention in this connection that tungstate of soda (a cheap salt) will render muslins, &c. unflammable. But strange to say, it is not generally adopted, even on the stage, where the risks are so multiplied, because it is said to prevent the starch drying with due stiffness! We have all heard of what female courage is capable when little ones are in danger, but we hardly thought that it was equal to the task of risking precious life for the appearance of a muslin dress. We can only bow, and say—nothing.

Where fires have been traced to spontaneous combustion, it has generally been found that some

kind of decomposing vegetable matter has been the active instrument in their production. Cotton-waste which has been used for cleaning oily machinery and then thrown aside in some forgotten corner, sawdust on which vegetable oil has been spilt, and hemp, have each in its turn been convicted of incendiarism. The simple remedy is to avoid the accumulation of lumber and rubbish in places where valuable goods and still more valuable lives are at stake. Occasionally fires have been accidentally caused by the concentration of the sun's rays by means of a lens or of a globe of water, and opticians have for this reason to be very careful in the arrangement of their shop-windows. A case lately occurred where a fire was occasioned, it was supposed, by a carafe of water that stood on the centre of a table. The sun's rays had turned it into a burning-glass! It is stated, with what amount of truth we cannot say, that fires in tropical forests are sometimes caused by the heavy dewdrops attached to the foliage acting the part of lenses.

The advance which has been made during the last twenty years in all appliances connected with the art of extinguishing fires, has done much to limit or rather localise the dangers of such catastrophes; for whereas in the old days the lumbering 'parish squirt' was the only means of defence, we have now in all large towns steam fire-engines capable of throwing an immense stream of water with force enough to reach the topmost floors of very high buildings. The aforesaid 'squirt' was capable of little more than wetting the outside of contiguous buildings, with a view to prevent the spread of the original fire, which generally burnt itself out. But now our engines furnish a power which will often smother a large fire in the course of half an hour or less. Moreover, our well-organised fire brigades are trained to convey the hose to the nucleus of the flames, and much heroism is shewn in the carrying out of this dangerous duty. It will be especially interesting to the readers of this *Journal* to note that the first really efficient brigade was formed in Edinburgh by the late lamented Superintendent Braidwood. He was afterwards employed in a like service for London, where his devotion to duty eventually cost him his life. Like a true soldier, he died 'under fire.'

And now for a few simple precautions.

Let some member of the family visit every portion of the house before it is shut up for the night. (While he is seeing to the safety of the fires and lights, he can also give an eye to bolts and bars, and thus fulfil another most necessary precaution.) See that there is no glimmering of light beneath the bedroom doors for any unreasonable time after the inmates have retired to rest. Insist on ascertaining the cause of any smell of burning. It may be only a piece of rag safely smouldering in a grate, but satisfy yourself upon the point without delay. Do not rake out a fire at night, but allow it to burn itself out in the grate. (We have already referred to the danger of hearthstones set upon timber.) Do not allow an unused fireplace to be closed up with a screen unless it is first ascertained that there is no collection of soot in the chimney, and no communication with any other flue from which a spark may come. Caution servants not to throw *hot* ashes into the dust-bin. Let the slightest escape of gas be remedied as soon as possible, and remember

that the common form of telescope gasolier requires water at certain intervals, or it will become a source of danger. Finally, forbid all kinds of petroleum and benzoline lamps to be trimmed except by daylight. (A lamp was the initial cause of the great Chicago fire.)

Many other precautions will suggest themselves to the careful housekeeper. But after all, the best precaution is common-sense, which, however, is the least available, being the misnomer for a faculty which is far from common.

A CAST OF THE NET.

THE STORY OF A DETECTIVE OFFICER.

IN FOUR CHAPTERS.—CHAPTER II.

By ten o'clock on the following morning I had sketched out my plan, and more than that, I was down at the water-side and looking after a lodging, for I never let the grass grow under my feet. I must say, however, that I very much disliked the east end of London, and especially the river-side part of it; everything was so dirty and miserable and crowded, that to a man of really decent taste like myself, it was almost purgatory to pass a day in it. And on this particular occasion the weather changed the very day I went there; it was getting on towards late autumn (October in point of fact), and we had been having most beautiful weather; but this very morning it came on to rain, a close thick rain, and we didn't have three hours of continuous fine weather while I stopped in the east.

I was not likely to be very particular about my lodgings in one sense, though in another I was more particular than any lodger that ever came into the neighbourhood; and after a little trouble I pitched upon a public-house again, chiefly because my going in and out would attract less attention there than at a private house; so I secured a small second-floor back room at the *Anchor and Five Mermaids*, or the *Anchor* as it was generally called, for shortness.

The great recommendation of the *Anchor and Five Mermaids* was that it was nearly opposite to Byrie & Co.'s engineering shops, a ferry existing between the two places; this ferry was reached by a narrow dirty lane, which ran by the side of the *Anchor*, and I could see that numbers of the workmen came across at dinner-time. The *Anchor* stood at the corner, one front looking on the lane, the other upon the river; and once upon a time there had been, not exactly a tea-garden, but arbours or 'boxes' in front of the house, where the customers used to sit and watch the slipping; but this was all past now, and only the miserable remains of the arbours were there; and it was as dull and cheerless a place as the tavern to which Quilp took Sampson and Sally Brass in the *Old Curiosity Shop*, of which indeed it reminded me every time I looked at it.

I always had a readiness for scraping acquaintances; in fact it is not much use of your being a detective if you can't do this. If you can't be jonnick with the biggest stranger or lowest rough, you are no use on that lay. I really must avoid slang terms; but 'jonnick' means hearty and jovial; on a 'lay' means being up to some game or business. Before the first dinner-time had passed, I had got quite friendly with two or

three of Byrie's hands who came into the *Anchor* to have their beer; and I learned some particulars about the firm and then about the gatekeeper, that helped me in my ideas.

Directly after they had all gone back, I went over too, and the dinner-traffic having ceased, I was the only passenger. The ferryman did not like taking me alone, but he was bound to do it; and he looked as sulky as if he was going to be flogged at a cart's tail. He was a tall, bony-headed fellow, between fifty and sixty I should say; and I noticed him particularly because of an uncommonly ugly squint in his left eye. In accordance with my plan, I began talking cheerfully to him while he was pushing off from the shore; but he didn't answer me beyond a growl. Then I offered him some splendid chewing tobacco, which a 'friend just over from America had given me.' Really and truly I had bought it within a quarter of a mile of the *Anchor and Five Mermaids*, but he wasn't to know that. I can't chew; I hate the idea; but I put a piece of the tobacco in my mouth, knowing how fond these waterside men are of the practice, and how friendly they get with one of the same tastes. To my surprise, he would not have it, and I was glad to pitch my plug into the river when he turned his head away. But confound these cock-eyed men! there is never any knowing where to have them. He had not turned far enough, I suppose, or I didn't make proper allowances for his squint; for as I threw my plug away with a shudder—it had already turned me almost sick—I caught his plaguy cross-eyes staring full at me. I knew it was, by the expression on his face; that was my only guide, for an astronomer could not have told by his eyes in which direction he was looking.

The ferryman pulled well, however; and just as we got athwart the bows of a short thick-looking craft—it is of no use my trying to say what kind of a craft she was; I can't tell one from another—a voice hailed us. 'Ay, ay,' says the boatman, lifting his scull; 'do you want to go ashore, captain?' 'Yes,' returned a voice; and I looked up and saw a man leaning over the side of the vessel; and the boatman sending his wherry close under the ship, the stranger slid down by a rope very cleverly, and got in. Though the boatman had called him 'captain,' and though he was very clever with the rope, he didn't look altogether like a regular sailor; he was a dark full-faced man, with black eyes, a dark moustache, and curly greasy-looking hair.

The stranger said a few words in a very low tone to the boatman, evidently to prevent my overhearing, and then nothing passed until we landed. The sulky ferryman took his fee without a word; and I went straight to the wicket-gate of Byrie's factory, where of course I found the gatekeeper. I stated that I was in want of employment, and had heard they were taking on labourers, and so had applied for a job.

'No; I don't know as we want any more hands,' said the man, who was sitting down in a little sentry-box; 'and we have had plenty of people here; besides, you're lame, ain't you?'

'A little,' I said, limping as I moved; 'not very bad: a kick from a horse some years ago.'

'Ah! you won't do for us then,' he said; 'but I'm sorry for you. I'm lame too, from a kick of a horse; I can't stand without my stick; here he

rose up to let me see him; 'but you see I was hurt in the service, and the firm have provided for me. I'm very sorry for you, for it's hard to be slighted because you are a cripple. Here is sixpence, old fellow, to get half a pint with, and I wish I could make it more.'

I took the sixpence, and thanked him for his kindness; he deserved my thanks, because he wasn't getting more than a pound a week, and had four or five little children. I found this out afterwards.

I was satisfied at having made a friend who might prove useful; but I had one or two more questions to ask him, and was thinking how I could best bring them in, when he said hurriedly: 'If you could get hold of Mr Byrle by himself, he might do something for you, for he is a very good sort; and you seem strong enough in every other way, and would make a good watchman, I should think.'

Yes; he did not know how good a one!

'Mr Byrle senior or junior?' I asked, on the strength of my information from the hands at the *Anchor*.

'Junior! O lor! that wouldn't do at all!' exclaimed he with quite a gasp, as if the idea took his breath away. 'It's a case of "O no, we never mention it" with him. He's seldom at home, and when he is, he and the old gentleman lead the very— Here you have it! Here's Mr Forey, the only foreman in the place who would listen to you. Now, speak up!'

Mr Forey, a dark-whiskered, stoutly built man, came up, glancing keenly at me as a stranger; so touching my cap, I again preferred my request to be taken on as a labourer.

'I don't like lame men,' he said; 'but there does not seem to be a great deal the matter with you. You say you can have a first-rate character. We shall be making changes next week, and there's no harm in your looking round on Monday morning at nine sharp.—Stop! I can give you a job now. Do you know how to get to T—?'

'Yes, sir,' I said.

'Then take this letter to Mr Byrle, and bring back an answer,' said Mr Forey. 'If he is not at home, ask for Miss Doyle, who may open it. I want an answer this afternoon; so cut off! Stay! here's a shilling for your fare; it's only tenpence, you know; and I'll leave eightpence with Bob here at the gate for your trouble.'

I took the shilling, Bob winking triumphantly at me, as if to say it was as good as done, and I left the yard.

I was amused at having the commission, for I wondered what Mr Byrle would say when he saw me, and whether my disguise was so complete that he would not recognise me at all. That would be something like a triumph, and I almost made up my mind that it would be so. Had Mr Forey seen me hurrying to the station, he might again have said that there did not seem much the matter with me; but I walked slowly enough through the street in which the *Yarmouth Smack* was situated, and had a pretty good trial of my disguise and my nerves as I passed it. Peter Tilley, dressed in a blue slop and cord trousers, so as to look like a dock labourer or something of that kind, was leaning against the door-post, lazily watching the passers-by. I made up my mind to try him; so stopping at a lamp-post just opposite to him, I took out my pipe, struck a match on the iron, coolly

lit the tobacco, and after one or two puffs, threw the match into the road and walked on. He never knew me. It was all right.

The drizzling rain came down again as I got out at T—; but luckily Mr Byrle's house was not more than a quarter of a mile from the station; and so resuming my limp, I got there without delay. The man-servant who answered the door took my letter, but told me that the old gentleman was not at home; then on finding Miss Doyle was to open the letter and send an answer, told me to wait in a little room which looked as if it was used as an office, having floor-cloth instead of carpet, wooden chairs, and so forth. He was a careful servant, and would not ask a stranger to wait in the hall, where coats and umbrellas might be had by a sharp party.

I had not waited long, when the door opened, and a young lady, whom I of course judged to be Miss Doyle, came into the room. She was a dark, keen-looking young party, and spoke rather sharply. 'You are to take an answer back, I believe?' she said.

'Yes, miss,' I answered, touching my forehead, for as you may suppose, I held my cap in my hand.

'Mr Forey only wishes me to send word; I am not to write, she went on; 'he wants to know if Mr Byrle will be at the works to-morrow. He will not. Tell Mr Forey he will leave town to-night, and not return until the day after to-morrow. You understand?' She spoke very sharply; so I said: 'Yes, miss,' sharply too, and touched my forehead again.

'You need not wait,' she said; and opening the door, I saw the servant waiting to let me out. I knuckled my forehead again, and putting on rather a clumsy limp than before, got out of the house into the rain and mud. Rain and mud! What did I care for rain and mud now?

'Sergeant Nickham,' says I, when I got fairly out of range of her windows, for I wouldn't trust her with so much as a wink of mine—'Sergeant Nickham,' I said, 'you are the boy! If you can't command your face, there isn't a man in the force as can. If you haven't got a memory for faces, find me the man who has, that's all about it!'

Why, of all the extraordinary capers that I ever tumbled to in my life, I never came near such a caper as this. Miss Doyle! That was Miss Doyle, was it? Right enough, no doubt; but if she wasn't also the sham clerk who came and found that I was put on the watch by Mr Byrle, I didn't know a horse from a hedgehog—that's all. The quick look of her eye, her sharp quick voice, the shape of her face, the very way she stood—lor! it was all as clear as daylight. But then I thought, and I kept on thinking till I had got back to the works, what could she have to do with stealing engine-fittings? 'Twasn't likely as she had anything to do with that. It was past all question in my mind as to her being the same party. I knew it for certain; and then came the point—What did she dress herself up for and come a-spying on me and her uncle?—for she was Mr Byrle's niece.

I hadn't got to the bottom of this by any means, by the time I got back to the works; however, I gave my message very respectfully to Mr Forey; and offered Bob the gatekeeper his sixpence back, with many thanks.

'No, old chap,' he says; 'keep it at present. If you get on regular, I'll take it off you and a pint into the bargain the day you draw your first week's cash; but a fellow out of work knows the vally of a sixpence.'

The same ferryman took me back; and his temper hadn't improved, I found. I fancied too that he was particular watchful of me, and so I was particular watchful of him; and from long practice I could do it better and more secretly than he could, although he *had* got a cross-eye. Lor! I could tell when we were nearing that same ship that the man climbed out of; I could tell it by the cunning way in which the boatman looked at me, to see if I would take any special notice of it. I didn't know what his little game might be, but I determined to spoil it; so I stooped down, and was tying up my shoe, making quite a long job of it, till after we had fairly passed the craft, and then I looked up with an innocent face that quite settled him.

Just as we pushed up to the hard (that's the landing-place), he says to me: 'Do you often cross here?'

'Not often,' I said; 'at anyrate, not yet. I generally cross a little higher up.' (That was very true; about Westminster Bridge was my place; if he liked to think I meant somewhere about Tooley Street or Billingsgate, of course I couldn't help it.) But I mustn't lift my old quarters, and so I shall often go this way.'

'Ah,' he says, 'you live at the *Yarmouth Smack*, don't you?'

'The what?' I said. 'Where's that?'

'The *Yarmouth Smack*,' he says again, pointing to the side we had come from. I knew where the *Yarmouth Smack* was well enough; but I shook my head, and said: 'No; I live on this side of the water; but I shall live anywhere when I can get work.'

He didn't say any more; I did not suppose he would; but there was something uncommonly suspicious in his talking about the *Yarmouth Smack*, something more than I could believe came from chance.

In the lane, just as I was about to turn into the side door of the *Anchor*, I met the foreign-looking captain, who must have crossed the river before me, as I had last seen him on the other side. He knew me, I could tell well enough, and I knew him; but I was not going to let him see where I was going, so I passed the door of the *Anchor*, limping on till he was clear; then I hurried in, went upstairs at once, and was out in the old ruined arbour I have spoken of in a minute. These overhanging the river at high-water (it was nearly high-tide now), and the high-tide of the ferry was close to them. The ferryman and the captain were talking, as I expected they would be, while the boat was waiting for passengers; and by standing in the corner box, I could have heard every word they said, if they had spoken out, as honest people should speak. But they were that artful and suspicious, although they could not have known there was anybody listening, that they talked almost in whispers, and I only caught the last bit from the ferryman. 'No,' he says; 'he's not the party; but I'll go up to the *Smack* to-night and make sure of the man.'

Ah! as I thought; they were both in it somehow. But what a most extraordinary fuss and Gun-

powder Plot sort of business there was about stealing a few bits of metal. I actually should have felt ashamed of the East-enders, who are really some of the sharpest folk I ever came across, if I had not felt there was a something behind, and that, by a lucky accident, I seemed upon the point of finding it out.

The night—my first night in the east too—was not to pass without an adventure, and I had not seen the last of my new acquaintance the captain. I got very tired of the company in the *Anchor*—not that I mind who I mix with, and if there had been any of the factory hands about the place, I would have sat with them until the house closed; but they only came there at meal-times it seemed, or on their road home. So I walked about the neighbourhood a bit; not because it was pleasant for it was a wet night; and what with the rain and the mud and the drunken sailors and the fried-fish shops and the quarrelling there was going on, it was anything but agreeable. The fact is I like to know every court and alley in my district, and there were some pretty courts and alleys here. However, nobody thought me worth robbing, and besides, I am always civil, so I never get interfered with. It's a capital rule; the best I know; and costs nothing.

When I was coming back, and had got pretty nearly to the *Anchor* and *Five Mermals* again (it is very absurd to give such long signs to public-houses), I saw a very pretty girl whom I had noticed before, standing at a corner out of the rain; but it was not raining very much now. She wasn't—well, I won't say what she was not, or what she was. She was very pretty, I say, and was doing no harm there; but two or three fellows coming by at the moment, one of them took hold of her roughly, and finished by almost pushing her down. She got away from him, and drew a door or two off; but his companions laughing at him for being bested by a woman, he followed her, and on her pushing him from her, gave her a back-handed smack in the face. There were several men loitering about, smoking and so forth, and I heard one or two say it was a shame; but none of them interfered; and I, being a little way off, and not wanting to get into a row, might have passed this over; but she called him a brute and a coward, and he went at her to strike her again. She ran across the road to where I stood, to avoid him, and he followed her. Then I saw it was my acquaintance the captain.

He swore more horribly than ever I heard any one swear, and springing forward, would certainly have hit her down; but I jumped between them and knocked up his arm. 'Bravo!' said some women, who had been attracted by the girl's scream; and 'Bravo!' said the men who hadn't interfered. At once the captain turned on me, and let fly desperately at my head; but I was not to be had in that way, and I stopped him and returned a hit that I know must have loosened a couple of teeth; and then he swore again, and began to pull off his coat. So did I.

'Don't fight wid him, my darlin', said an old Irishwoman, who was selling herrings, laying her hand on my arm. 'You're an honest English boy, and these fellows will have a knife in ye if they can't bate ye fair.'

'No, Biddy, they shan't,' said one of the men coming forward, followed by half-a-dozen more.

'If there's to be a fight, it shall be a fair one; and mates, we'll put any fellow into six feet of mud who only shews a knife.'

His mates said so too, and they were a rough and likely lot for it, and the river was within a score or so of yards. So with a scowl at them (for I do believe now he meant murder; I didn't think of it then, although I was a policeman), he rolled up his sleeves and came at me.

He was a strong fellow, not so tall perhaps, but certainly heavier than I was, and I daresay, from his manner, fancied he could fight. But fight me! Why, a gent once offered through Alec Keene (he had seen me spar in private at Alec's), to make it worth my while to leave the police, and he would back me against any ten-stone-four man I fancied, for a hundred; and I was half inclined to take it too, only something important turned up just then. Well, in two rounds I settled the captain. He tried to catch hold of me and throw me; but I knocked him clean off his legs each round; and then his friends took him away.

'There's one comfort at any rate in having had the row,' I thought: 'he'll never suppose I'm a detective after this.'

I wished, however, it had never come off, there was such a fuss. Why, if I could have drunk shillings and sixpences, I might have had them, I do believe. In a place like that you get a crowd directly; and although the affair did not last three minutes, there was a hundred men and as many women too, anxious to treat me; and I was naturally obliged to drink with one or two; not at the *Anchor* though.

The affair made such a stir, that I read in one of the local papers the next week how Jem Mace had been down in the neighbourhood of the Docks, incog.; and that for once the brute strength of a boxer had been used in a good cause, and all that sort of nonsense. I know I have always found the best class of boxers very good fellows.

Of course I was vexed at this shindy having taken place so early, as the quieter I kept myself the better; and I would have given five pounds to have been out of it. My wishing this only shews you never know what is coming; and something came out of this street fight that I never expected.

SEA-LIONS.

The domestication of a pair of 'sea-lions' at the Brighton Aquarium, and the subsequent addition, some few months ago, of a 'little stranger' to this interesting family circle, afford an opportunity for a brief description of some of the more prominent points in the structure and habits of these little-known animals. The name 'sea-lion,' to begin with, is by no means so inappropriate or far fetched as popular designations are usually found to be, when submitted to scientific criticism. For the 'sea-lion' is included by zoologists along with the seals and walruses in the great Carnivorous order of quadrupeds, to which, it need hardly be remarked, the lions, tigers, bears, dogs, and other flesh-eaters belong. The sea-lion is in fact a large seal, and seals and walruses are simply marine bears; and if we can imagine the body of a familiar bear to be somewhat elongated, and that

the limbs were converted into swimming paddles, we should obtain a rough but essentially correct idea of the zoological position of the seals and their neighbours.

But whilst the seals and sea-lions are united with the walruses to form a special group of carnivorous quadrupeds, adapted to lead a life in the sea, there exist some very prominent points of difference between the common seals and the less familiar sea-lions. The sea-lions and their nearest allies are thus sometimes named 'Eared seals, from the possession of an outer ear; the latter appendage being absent in the common or True seals. And whilst the common seals waddle in a most ungainly fashion on land, the sea-lions are able to 'walk,' if not elegantly, at least with a better show of comfort than their more familiar neighbours. A glance at the structure of the sea-lion's feet, or better still, a comparison of its members with those of the seal, shews the reason of its greater skill and ability in progression on the land. The fore-limbs of the seal are, so to speak buried in the skin, below the elbow; only a small part of the fore-arm and hand being thus free from the body. The hind-limbs of the seals, again, exist in a permanently extended condition, and are disposed backwards in a line with the tail and body. The hind-limbs, moreover, are frequently united with the tail by means of a connecting fold of skin, and the whole hinder extremity of the body in a seal may thus be regarded as forming a large tail-fin. In swimming, the fore-limbs of the seal are applied closely to the sides of the body, and serve as rudders; whilst the hinder portion of the body, hinder limbs, and tail, constitute the swimming-organs—a work for which by their great flexibility they are perfectly adapted.

In the sea-lions on the other hand the fore-limbs are free from the skin and body to a much greater extent than in the seals. The 'hand' itself in the sea-lion is exceedingly flexible, although completely enclosed in a horny or leathery skin. The thumbs of this hand further exist in a well developed state; all five fingers being of nearly the same length in the seal. As regards the hind-feet of the sea-lion, these members, like the fore-limbs, are freely separated from the body, at least as far as the ankle and foot are concerned, and the foot is turned outwards, forcibly reminding one of the conformation of that organ in the bear. But we may only note by way of conclusion to these zoological characters that the teeth of the sea-lion are decidedly of a carnivorous type. Any one regarding the skull of a sea-lion could readily form the idea that the animal which possessed it was a flesh-eater. These animals usually possess thirty-six teeth; the 'eye' teeth being of very large size, and so placed in the jaws that any substance entering the mouth is firmly held by these teeth and the adjoining front teeth. The 'grinders' of the sea-lion are small, and do not appear to be of any very great use to the animal. These creatures swallow their food—consisting of fishes, molluscs, and sea-birds—whole, and when

a large fish is divided in two, the portion retained in the mouth is swallowed; the portion which tumbles into the water being afterwards seized and duly swallowed in its turn.

That the sea-lions are by no means destitute of the craft and cunning of their land-neighbours, is proved by the fact that they capture such birds as the penguins by lying motionless in the water, allowing merely the tip of the nose to appear at the surface. The unwary bird, swooping down upon the floating object, presumed to consist of something eatable, is then seized and devoured by the concealed enemy.

Sea-lions may be regarded as the unknown, or at anyrate unrecognised benefactors of the fair sex, inasmuch as, from the rich *under-fur* which they possess, the favourite material known as 'seal-skin' is obtained. This latter name is entirely misleading in its nature; the much prized material being the produce of the sea-lion and not of a true seal. The possession of this valuable under-fur has contributed very largely to the causes of the indiscriminate attack which has for years past been made upon the sea-lions. The spirit of commercial enterprise has resulted in a war of extermination against these animals in certain regions, from the effects of which it is doubtful if the species can ultimately recover.

The sea-lions differ materially from the seals in their geographical distribution. The latter animals, as every casual reader of a natural history textbook knows, inhabit temperate and northern seas. The sea-lions, on the other hand, are found to be absent from all parts of the Atlantic Ocean save its most southern portions. They are common on the South American coasts, and are found inhabiting island-groups which may be regarded as belonging to the same zoological province as the latter continent. The mouth of the River Plate is stated as the most northern boundary of these animals on the eastern side of South America, whilst on the western or Pacific side of the New World they are found on the Californian coasts, and are even met with on the coasts of the Aleutian Isles and of Japan. The Pribylov Islands, included in the Alaska group, are regarded as forming the most northerly point of the sea-lions' distribution; and these islands—now in the possession of the United States—together with the Falkland Islands and the Cape of Good Hope, still form the three chief sources from which the seal-fur or seal-skin of commerce is obtained. It is also well ascertained that sea-lions occur at Kerguelen's Land, on the New Zealand coasts, on the Tasmanian shores, and the east and south coasts of Australia.

The average length of a large male sea-lion ranges from six to seven or eight feet, his weight averaging six hundred pounds. The females are of much smaller size than the males, and measure from four and a half to five feet in length; their weight being from one hundred to one hundred and fifty pounds. These animals, as might be expected, grow slowly, and attain their full dimensions the males in six, and the females in four years. The habits of these animals are not only of curious and interesting nature, but evince a decidedly high order of intelligence. The haunts of the sea-lions are, in whalers' parlance, named 'rookeries'; and in the disposition of what may be termed their domestic arrangements, as well as in the regulation of their family and personal matters, these creatures appear

to be guided by instincts which, like the social order of the ants and bees, are duly perpetuated, and have become of hereditary character. The sea-lions are migratory in habits, and disappear from the majority of the haunts and breeding-places in winter. The males are few in number as compared with the females or 'cows,' as they are termed; and each male receives under his protection a larger or smaller number of females; the oldest males possessing the largest number of dependants. In the early spring, some old males appear to return first to the haunts and do duty as reconnoitring parties; the advance-guard swimming about for several days, then landing and cautiously investigating the state of the land; their shore-visits being spent in a state of perpetual sniffing, and in the careful examination of their old haunt. About a month or six weeks after the arrival of the advance-guard, and after the inspection of the land has been duly carried out, sure signs of the coming race begin to appear in the form of hundreds of males, who select advantageous positions on the beach, and await the arrival of their partners. Nor is the period of waiting an uneventful one. The best situations on the beach are fought for with eagerness, not to say ferocity. The descriptions given of the combats of the males indicate that they are of the most sanguinary description; frequent mutilations being the results of this fight for a place on the reception-ground.

On the arrival of the females, the younger males appear to do duty as ushers, in marshalling the 'cows' to their places on the rocks and cliffs above the beach; and the work of the selection of mates by the males proceeds apace, until each happy family, consisting of a male with a dozen or fifteen cows, has been duly constituted. The progress of selection and sea-lion courtship is frequently, we regret to say, attended with disastrous consequences to the lady-members of the community. When a male, envious of the choice of his neighbour, sees an opportunity, he does not hesitate to avail himself of the chance, and not only to covet but literally to steal his neighbour's mate. The desired 'cow' is unceremoniously lifted in the mouth of the captor, and transferred with all possible expedition to his own family group. Great is the sorrow of the bereaved male; but woe to both intruder and female should the thief be discovered in the act! A fierce and sanguinary fight ensues, and the hapless, passive, and altogether innocent cause of the combat, may get dreadfully injured while the combat lasts.

The young sea-lions usually appear to be born almost immediately after the parents have landed and been allocated to their respective establishments. One young is produced at a birth; the infant sea-lion being of black colour and attaining the length of a foot. When they are four weeks old, they enter the water, and speedily become expert in swimming and diving; but it is alleged, and on good authority, that occasionally the females encounter refractory offspring, and have to exercise great patience in coaxing unwilling youngsters to enter the sea. The families have settled down to their wonted existence by the beginning of August; and we are informed that during the whole of the period which intervenes between the arrival of the females and the period last mentioned, the males have not only been most assiduous in their

attendance upon their families, but that they have also been existing independently of any nutriment. The males exemplify a case of living upon self, and appear to subsist by the reabsorption of their fatty matters; in the same fashion as the bears, which retire fat and well nourished to their winter-quarters, and appear in the succeeding spring in a lean and emaciated condition.

Regarding the sea-lions and their young at present in captivity in the Brighton Aquarium, it is interesting to note the incidents connected with the first 'bath' of baby *Otaria*. This prodigy in the way of an aquarium specimen, tumbled accidentally into the water of his tank, and apparently caused his mamma much anxiety. It is stated that he plunged voluntarily into the water on a subsequent occasion, and appeared to be perfectly at home in his native element; swimming and diving with all the dexterity of an accomplished professor of the art of natation. Being startled by some sound, the young otaria dived beneath the surface of the water, the mother seizing her progeny by the neck, and swimming ashore with it in her mouth. On the occasion of the writer's visit to the Brighton Aquarium, the mother and young were disputing themselves in the water; the male sitting up in the tank, and giving vent to repeated sounds, resembling exactly the hoarse bark of a dog. We may heartily re-echo the wish, that the happiness and amenity of this interesting family may be disturbed by no untoward accident, if for no other reason that they exist among us as the representatives of a most interesting and now comparatively scarce group of quadrupeds.

It has often been disputed by naturalists whether or not the sea-lions possess a mane. There can be no doubt that the old males of one species at any rate, the *Otaria jubata* or Cook's sea-lion, the most common form on the South American coasts, possess a mane on the neck and shoulders. Nine or ten different species of sea-lions are known to zoologists, these species being distinguished from each other by very distinct variations in the form and structure of the skull, in the fur, &c. It must, however, be borne in mind, that the recognition of the exact species to which a sea-lion belongs is frequently a very difficult matter, owing to the differences perceptible in the fur of the two sexes and in the fur of either sex, at different ages.

The complaints of zoologists regarding the ill-regulated and indiscriminate slaughter of the sea-lions are, it is to be feared, as well founded as have been our own repeated remonstrances against the wholesale slaughter of seals. The United States government, however, it is satisfactory to learn, still regulate their sea-lion fisheries at the Pribilof Islands in a methodical manner. Thus the young males alone are killed, and the period during which they are taken extends from June to October; whilst the total number of sea-lions killed annually is limited. In the South Sea Islands, these animals were killed in such numbers that they are now exceedingly scarce; British and Americans alike, slaying the sea-lions without in the slightest degree discriminating between the sexes, or between young and old seals. It is to be hoped, for the sake of science as well as of commerce, that time has taught us wisdom in this respect. We have seen how necessary legislation has become to insure the prosperity of our home-fisheries; and now that the Royal Commissioners

have finished their labours in behalf of crabs and lobsters, salmon and herring, it would be well for the public interests if Mr Frank Buckland and his coadjutors were empowered to look after the sea-lion and the seal.

ANCIENT STREETS AND HOMESTEADS OF ENGLAND.

WITH kindly regard for the names, the places, and the landmarks of our forefathers, which may be called the sentimental side of our national stability, are usually, but unfortunately not invariably combined the good sense which improves but does not destroy, and the good taste which recognises the intrinsic beauty of antiquity, its harmony with our history, and the dignity which it lends to the present. Foreigners are always deeply impressed by the 'ancientness' of England, by the maintenance of the old names, and the blending together in our cities of the convenience and luxury of modern life, with the memorials of a past as grand as any country has to boast of, and marked by far less vicissitude.

Among the evidences of the stability of England to which the attention of her own students of her history and that of foreign visitors may most worthily be directed, is the minor monumental history which Mr Alfred Rimmer illustrates, and whose value and interest the Dean of Chester points out in an interesting volume entitled *Ancient Streets and Homesteads of England* (London: Macmillan & Co.); the history of the old buildings which still remain in the old streets of our old cities, in our villages and in our hamlets.

It is pleasant to ramble with Mr Rimmer from county to county of the old land, gathering as we go a great company from the past; and assuredly all will agree that no better starting-point can be found than Chester, the pride of archaeologists, the boast of historians, the city whose renown has been touched into equal brilliance and tenderness by the genius of Sir Walter Scott. An American traveller has well described the charm of the city. 'It is full,' he says, 'of that delightful element of the crooked, the accidental, the unforeseen, which, to eyes accustomed to eternal right angles and straight lines, is the striking feature of European street scenery. The Chester streets give us a perfect feast of crookedness—of those random corners, projections, and recesses, those innumerable architectural surprises and caprices and fantasies which offer such a delicious holiday to a vision nourished upon brown stone fronts.' Shrewsbury perhaps gives at first sight a more vivid picture of a fine old English town, but it has not so many treasures hidden away under modern exteriors. It is likely, Mr Rimmer tells us, that even the oldest inhabitant of Chester is ignorant of the ancient relics which the city contains. Though the origin of the famous 'Rows' is disputed—some antiquaries holding them to belong to the Roman era of the city, and to have been simply an extension of the vestibule of Roman architecture; while others consider that they were built as a refuge for the citizens during any sudden attack of the Welsh—there is but one estimate of their quaint old-world beauty; and perhaps there is no relic of the past

in all England which has more stirring memories to arouse than Chester Castle, with its Julius Cæsar's tower still standing firm against the influence of time, and its tradition of Hugh Lupus Hall.

Next to the completeness of the ancient walls of Chester, its carved woodwork strikes the visitor as an instance of conservation. The carved front of the house which belonged to Randal Holme, who left valuable records of the city, is much more ancient than the date it bears (1664); and though the house called Bishop Lloyd's is now divided into tenements, the splendid remains of its ceilings and fireplaces are preserved. A little beyond it stand the beautiful cottages, with their carving intact, into which Stanley House has been divided. Here the Earl of Derby, who was executed at Bolton in 1667, passed his last day. Some of the famous carved oak furniture of this historic mansion found its way a few years ago into the possession of Mr Sly, the landlord of the celebrated *King's Arms Inn* at Lancaster, and was sold in the spring of the present year at the dispersion of his collection. One magnificent black oak bedstead splendidly carved is now in the possession of the Duke of Norfolk. Looking at the beautiful carved fronts of the cottages, and thinking of the terrible time in which the chief of the great House of Stanley left his ancestral home for ever, we are reminded of the quaint story which the earl's gentleman, Mr. Baskley, related concerning that departure. "One Lieutenant Smith, a rude fellow," he says, "came in with his hat on, and told my lord he came from Colonel Duckenfield the governor, to tell his lordship he must be ready for his journey to Bolton. My lord replied: "When would have me to go?" "To-morrow, about six in the morning," said Smith. "Well," said my lord, "command me to the governor, and tell him I shall be ready by that time." Then said Smith: "Doth your lordship know any friend or servant that would do the thing your lordship knows of?" "I would do well if you had a friend." My lord replied: "What do you mean—to cut off my head?" Smith said: "Yes, my lord; if you could have a friend." My lord said: "Nay, sir; if those men that would have my head will not find one to cut it off, let it stand where it is."

The Blue Posts, 'God's Providence' House, with its inscription of thanksgiving that its inmates had been spared from the plague; the beautiful gabled house in Whitefriars, with its fine mouldings and traceries, are but a few of the memorials of the past over which one lingers in Chester, before passing on to the eastern part of the county where one finds a special treat in the old town of Congleton, which presents features of successive periods of antiquity in its still and picturesque streets, and is surrounded on all sides by venerable family seats. Mr Rimmer's drawing of the old *Lion Inn* gives a charming idea of a black-and-white gabled hostelry, with a vast porch resting on stone pillars, and supporting a room above it. The interior preserves all its old characteristics, and has a quiet ponderousness about it, as of an inn to which wayfarers came in coaches with armed outriders on horseback, with led-horses charged with baggage, or in heavy wagons. The idea of railways or smart dog-carts, or the pertness of all modern vehicles in fact, in connection with the *Lion Inn*, has a kind of impertinence about it.

Over the Cheshire border in Shropshire there is a great deal of interest for the student of the street architecture of the past; and in that county picturesque old inns abound. We find one at Ellesmere, with the grass growing in the vast courtyard, built round by the now empty stables, which were so full of life and bustle in the old coaching days. Mr Rimmer's very brief mention of Ellesmere implies that it is a much less important place than in reality it is; and all he says about Shropshire conveys an impression that he has not studied the antiquarian aspect of his subject at all so deeply as its artistic.

Two miles from Oswestry lies Whittington village, a perfect example of the solid and beautiful in village architecture, with the gateway of Peveril's Castle opening into it, and the birthplace of Sir Richard Whittington left to the choice of the visitor. Oswestry itself is an exceedingly interesting town; portions of the old wall still remain, with several stone and half-timbered houses of great antiquity; but it is seldom thoroughly explored, because the tourist is generally anxious to reach the county town of Shropshire, that famous city of Shrewsbury, which we know better perhaps through Shakespeare than through the historical chronicles of its life. The author might, however, have accorded more lengthened notice to Oswestry, which, if tradition may be relied upon, dates from the fourth century of the Christian era, and which undoubtedly derives its name from the overthrow and martyrdom of Oswald, the Christian king of Northumberland, who was vanquished there by Penda, the pagan king of Mercia.

Oswestry is stated to have been the site of a castle built in 1149 by Magod, one of the princes of Powys. It then passed, by marriage, into the hands of a Norman lord of Cheshire; and it was here that in 1164 Henry II. assembled the army with which he marched to Chirk, in his vain attempt to subjugate the principality. In 1277 Edward I. surrounded the town by a wall which was a mile in circumference, had four gates, and was further defended by a moat. In the thirteenth century both castle and town were destroyed by fire. Many scenes of our martial history pass before the mind's eye of the visitor to Oswestry. In 1403, Owen Glyndyr (or Glendower) marched from thence towards Shrewsbury at the head of twelve thousand men, intending there to unite his forces to those of the Earl of Northumberland and his son. Tradition, however, alleges that by the time he reached Shelton, two miles from Shrewsbury, he found the royal forces were engaged in battle with their enemy. The story of that eventful day is one out of which to make a mental picture as one contemplates the approach to Shrewsbury. Hotspur and his father had encamped on the previous night at a place called Berwick, nearly opposite Shelton, and they calculated on being joined there by Glyndyr. They sorely needed his aid; the rebel army numbered only fourteen thousand men, while that of the king numbered twenty-six thousand. In vain they waited; in vain a few unsuccessful attempts were made at a compromise, and then at a place still known as Battlefield, and in a field yet called 'the King's Croft,' the battle was joined. Before, however, the first blow was struck, Harry Hotspur called for his sword, and was informed by his

attendant that he had left it at Berwick. The iron warrior, who was about cheerfully to encounter a force greatly outnumbering his own, turned pale. 'I perceive,' he said, 'that my plough is drawing its last furrow, for a wizard told me that I should perish at Berwick, which I vainly interpreted of that town in the north.'

The Welsh chieftain climbed into the tree and beheld the conflict; at what period of the engagement is not told; but as he concluded the king would be victorious, he quietly came down again, and leaving Percy to defeat and death, marched back to his mountains. The old oak yet remains; but for the forty years during which we have known it, it has been in a failing condition. One by one its great boughs have yielded to the storm, or broken beneath their own weight; and it is now propped up with crutches and bound together with iron hoops. Probably in another half-century the place which has known it for at least six centuries will know it no more.

One of Mr Rimmer's illustrations shews us a street in Shrewsbury which may justly claim to be one of the most perfect examples of English streets yet remaining, if not the most perfect. The beautiful old gabled houses with their projecting richly carved fronts are in excellent preservation, and for a considerable distance a person walking down the middle of the street can touch them on each side; such was the economy of room in walled cities, which renders their physiognomy just the opposite to that of villages, in which the wide spaces constitute an especial beauty. Behind the city rise the Hanghamond hills, clear and sharp, and wooded to their summits. Mr Rimmer tells us, that when the sun rises red over these hills, and especially if this red rising be accompanied by noise of wind, it is a certain sign of a stormy day; thus proving the truth of Shakespeare's description of how 'bloodily the sun began to peer above yon bosky hill,' upon the fatal day of the battle of Shrewsbury. Says Prince Henry to his father:

The southern wind

Doth play the trumpet to his purposes;
And by the hollow whistling in the leaves
Foretells a tempest and a blustering day.

We wish we could find in the facts a sanction for the author's statement, that in no town in England are the interesting remains, dear to the antiquary and the student, more scrupulously taken care of than in Shrewsbury; but we have before us the eloquent and pleading testimony to the contrary of Mr Ansell Day, the enthusiastic and indefatigable champion of the rights and the dignity of the old city; and on comparing his description of Shrewsbury a hundred years ago with Shrewsbury as it now is, we learn how much has been lost within a century. A hundred years ago, Shrewsbury boasted five churches of renowned beauty. The Abbey and the collegiate church of St Mary still remain, deeply interesting to the antiquary and to the visitor. But what has been the fate of the three others—of St Chad's, of St Alkmund's (so spacious, so beautiful, famous for its exquisite tower, and built by a sister of King Alfred), and of St Julian's? St Chad's requiring reparation, a country builder was employed, whose well-intentioned performance caused the tower to fall in and destroy a portion of the church. Instead of the damage being repaired, the old church was

pulled down, and an expensive, hideous, and inconvenient structure was erected in its place. The other two churches were destroyed, without even the excuse of preliminary damage; indeed so strong and in such perfect repair were they, that their demolition was an exceedingly costly process; and the buildings which replace them are curiosities of ugliness. A hundred years ago, the ancient town was surrounded by walls with square towers at intervals, alike interesting and characteristic; only a few hundred yards of the wall now remain, and one tower alone stands, the solitary memento of the past. The ancient Abbey buildings too have been swept away; the Guesten House, formerly the scene of splendid and historical hospitality; the Refectory, where a parliament once assembled to meet its king; and of all the grandeur of the past, only the ancient pulpit remains, a beautiful object indeed, but an unmeaning one in its isolation.

Wenlock, Bridgenorth, Ross, and Monmouth with its ancient massive gate, bridge, and marketplace, are full of beautiful remains; and Worcester brings many a remembrance of the historic past before our minds while we gaze on Mr Rimmer's drawings of the Corn-market, Friar Street, and the Close of the beautiful cathedral, where Henry II. and his queen were crowned, and King John is buried. In old Worcester, the days of the Great Rebellion seem quite modern, and Charles II. and his unlucky brother, men of only the recent past. A beautiful and impressive drawing is that of the *New Inn*, Gloucester, that hostelry of a strange history, for it was designed to accommodate the pilgrims who used to go in crowds to the shrine raised in the Abbey Church of Gloucester over the remains of the murdered King Edward II. The vast old hostelry is enormously strong and massive, and covers an immense area. It is fully half of timber, principally chestnut-wood. Tewkesbury, Exeter, and Glastonbury are full of beautiful remains, finely rendered in this book. The Abbot's Kitchen at Glastonbury is one of the relics of the past best known in all England; here St Patrick passed the last years of his life, and here King Arthur is said to have been buried.

At Winchester are found grand examples of the domestic architecture of the fifteenth century, in addition to the superb ecclesiastical edifices of the city; Cardinal Beaufort's Tower, and St Cross, whose noble gateway, approached from the Southampton Road, is seen through great elms and walnut-trees, where the long lines of quaint high chimneys form with the church and the foliage an exquisitely picturesque combination. We pass on in the artist's company to Guildford, where the gateway of Esher Palace still remains to remind us of Wolsey's residence there after his downfall; to Salisbury, which differs from other old cities in having nothing Roman, Saxon, or Norman about it, but being purely English and unique; to Canterbury, with its wonderful wealth of antiquities, ecclesiastical, domestic, and military, all preserved with jealous care; to Rochester, with its grand and gloomy castle, and the noble cathedral, around which there hangs an atmosphere of romance; to Rye, with its ancient grass-grown streets, gabled houses, and church clock, said to be the oldest in England; to St Albans, which has just been raised by the Queen to the dignity of a city;

and from whose abbey the first books printed in England were issued; to Banbury, with its Old Parliament House, where Cromwell's fateful parliament sat, and the *Roebuck Inn*, which contains a room accounted the most beautiful Elizabethan apartment of the early style in existence. This was Oliver's council-chamber, after the taking of Banbury Castle.

After visiting Ely, Ipswich, Norwich, Lady Jane Grey's house at Leicester, and the crumbling ruins which only remain of the Abbey, we are bidden to the Fen counties, whose picturesqueness few are aware of, though their architectural beauties, especially those of Lincolnshire, are well known; and we are shown among many other curious things the market-place at Oakham, all roofed and shingled with solid old oak. There is a singular custom at Oakham: every peer of the realm on first passing through the town has either to pay a fine or to present the town with a shoe from his horse; the shoe is then nailed up on the castle gate, or in some conspicuous part of the building. Queen Elizabeth has left a memento of this nature at Oakham, as also have George IV. and Queen Victoria. These shoes are often gilt, and stamped with the name and arms of the donor.

The county of Nottingham is also amply illustrated; and we find a drawing of the famous *Saracen's Head Inn* at Southwell, which dates from the time of Henry IV., and where Charles I. gave himself up to the Scotch commissioners. The beautiful Minster, and the splendid ruins of the palace, once the residences of the archbishops of York, and many an old house and quiet glimpse of the home-life of the long past, are to be seen at Southwell, the place which monarchs and nobles vied with each other to endow and adorn. Warwickshire is but little noticed in this book beyond the inevitable Warwick Castle and Kenilworth; and yet how rich the land of the elm is in village, street, and homestead antiquity.

We would have welcomed further details of Coventry, that most interesting ancient city, the scene of the first days of the triumph of Henry VII., and of one term of the dreary imprisonment of Mary, Queen of Scots; the city of the wonderful church of St Michael, which may truly be called a dream—a poem in stone. York, Beverley, Durham, Lancaster, and Carlisle, all these the artist-author sets before us with their treasures of architecture and illustration of the social life of the past. Perhaps we linger longest over the noble views of Durham Castle, and the majestic cathedral with its three grand towers, which occupies one of the finest sites in England, and with the wooded bluff beneath it, is reflected in the broad bosom of the Wear. The author leads us so far north as Carlisle, but has not much to point to there of great antiquity. The Border city had to fight too hard for ages for her mere existence, to have means or leisure for the beautifying or refining arts. Her name is otherwise writ in history.

We are grateful to Mr Rimmer for this work, which will, we hope, give the impulse to much more literature of a similar order. There is a great need of closely studied and well-written histories of the old cities and towns of the United Kingdom, which, if not conceived merely in the dry antiquarian, nor yet in the simply picturesque artistic spirit, would induce readers to recognise, and lead them to explore the archaeological treasures of

their own countries, which may be reached with ease, and might, with the assistance of books of this kind, be studied with equal pleasure and profit.

JAPANESE FANS.

DURING the past few years, Japanese fans have become so popular in this country, that a few brief remarks respecting them and the manner in which they are manufactured—culled from the published Report by Her Majesty's Consul on the trade of Hiogo and Osaka—may perhaps prove acceptable to our readers.

Osaka, we learn, is the principal city for the manufacture of the *ogi* or folding fans, which are those almost exclusively exported, all descriptions of the bamboo kind being made there; the figures, writing, &c. required for their adornment are executed at Kioto. The prices vary from a few pence up to six pounds sterling per hundred, and occasionally even higher prices are given, though the bulk consists of the cheaper sort. The superior kinds of fans, it may be mentioned parenthetically, which are termed *ushiva* by the Japanese, are manufactured at Kioto, and are extensively used by the better classes of the natives.

The following are the principal features in the account which Mr Consul Annesley gives of the details connected with *ogi* or folding fans. As in many other branches of industry, the principle of division of labour is carried out in the fan-making trade. The bamboo ribs are made in Osaka and Kioto by private individuals in their own houses, and combinations of the various notches cut in the lower part are left to one of the finishing workmen, who forms the various patterns of the handle according to plans prepared by the designer. In like manner the designer gives out to the engravers the patterns which his experience teaches him will be most likely to be saleable during the ensuing season; and when the different blocks have been cut, it still rests with him to say what colours are to be used for the two sides of each fan. In fact, this official holds, if not the best paid, at any rate the most important position on the staff in ordinary. When the printed sheets which are to form the two sides of the fans have been handed over to the workman, together with the sets of bamboo slips which are to form the ribs, his first business is to fold the two sheets of which the fan is to be composed, so that they will retain the crease, and this is done by putting them between two pieces of paper, well saturated with oil, and properly creased. The four are then folded together and placed under a heavy weight.

When sufficient time has elapsed, the sheets are taken out, and the moulds used again, the released sheets being packed up for at least twenty-four hours in their folds. The next process is to take the ribs, which are temporarily arranged in order on a wire, and 'set' them into their places on one of the sheets, after it has been spread out on a block and pasted. A dash of paste then gives the woodwork adhesive powers, and that part of the process is finished by affixing the remaining sheet of paper. The fan has to be folded up and opened three or four times before the folds take the proper shape; and by the time

the fan is put by to dry, it has received far more handling than any foreign paper could stand; indeed foreign paper has been tried, and had to be given up, as unsuitable for the work; but with great care the Osaka fan-makers had been able to make some fans with printed pictures which had been sent over from America, though they were invariably obliged to use one face of Japanese paper.

The qualities of native paper now used are not nearly so good as those of which the old fans were made, and in consequence, the style of manufacture has had to be changed. Instead of first pasting the two faces of the fan together and then running in pointed ribs, the ribs are square and are pasted in their places in the manner described above. The outside lacquered pieces and the fancy-work are all done in Osaka and Kioto, and some of the designs in gold lacquer on bone are really artistic; but the demand for the highly ornamented description of fans is not sufficient to encourage the production of large quantities of first-class work. When the insides are dry, the riveting of the pieces together, including the outer covering, is rapidly done, and a dash of varnish quickly finishes the fan.

The highest price that was ever given for a fan in the days of seclusion from the outer world rarely exceeded a sovereign; but since the arrival of foreigners in the country, some few have been made to order at prices varying from two to three pounds sterling. The general prices of ordinary fans range from two or three shillings to three pounds per hundred, though an extraordinarily expensive fan is turned out at ten pounds per hundred. The sale of fans in olden times seldom exceeded ten thousand a year for the whole country; but in recent years no less than three millions per annum have been exported from the ports of Osaka and Yokohama alone. In concluding these brief notes, it may be interesting to mention that the number of fans ordered in Japan for the Centennial Exhibition at Philadelphia reached the large figure of eight hundred thousand, the estimated cost of which was ten thousand pounds, and that these were over and above the ordinary annual export alluded to before.

THE PIXIES.

AMONG the superstitions still far from being extirpated in Wales and some parts of Devonshire, is a belief in exceedingly small beings known as pixies. From anything we can learn, the pixies resemble the fairies of old English superstition, but with this difference, that pixies possess that love of fun and mischief which reminds us of the Puck of Shakespeare. When a pixy has been successful in any trick upon travellers, it is said to send forth a peal of laughter and to tumble head over heels to shew its delight; this has become proverbial in Devonshire; so that if any one laughs immoderately, he is said to laugh 'like a pixy.' The following pixy story is still current.

In a little country-place in the prettiest part of Devonshire there lived a miller's daughter, who was betrothed to a young farmer of the neighbourhood. For some time their course ran as smoothly as could be desired. But the young man began to cast looks of suspicion on another admirer of his betrothed, and to let a jealous

demon rankle within him, whispering to him that he no longer held the first place in the damsel's affections.

The miller's daughter, besides possessing considerable personal attractions, had the reputation of being the neatest and most industrious housewife in the place; and so the pixies, who invariably tried to aid the industrious, took her under their especial protection. They removed everything harmful from her path, and were always at hand to do her a service; she herself meanwhile being quite unconscious of the presence of the small people. One pixy used to place flowers on her window-sill every morning, and the maiden innocently dreamt that they were offerings from her lover, and prized them accordingly. One morning early about this time the young man passed before her house, and noticed the flowers upon the window-sill. Jealousy immediately took possession of him, and he saw in the simple flowers the offerings of a more favoured admirer. Just then the window was opened gently, and the miller's daughter appeared; and unconscious of the watcher lurking behind the hedge, she took up the rose-buds which formed her morning's gift and pressed them to her lips. Then she withdrew, taking the flowers with her, and leaving him to rage inwardly at what he considered her perfidy.

From that morning his behaviour towards her was changed, and he became gloomy and morose, throwing out hints of his suspicions from time to time, which troubled the gentle maiden, without her being able to comprehend any reason for it all. But the pixies, seeing how matters stood, determined to convince the moody fellow of her truth, and at the same time to punish him for his unreasonable jealousy. So one evening, when he was coming home from a market-town (perhaps top-heavy), he was pixy-led in a meadow just below the miller's house, through which he had to pass. Hosts of pixies gathered for the occasion, armed with nettles, thistles, and small bushes of thorn-trees. With these formidable weapons they pricked, stung, and mercilessly belaboured the unfortunate young man, dancing around him with mocking gestures, and chasing him from one end of the field to another.

Thus harassed, they kept him until the morning dawned, when one pixy came forward with a beautiful bunch of flowers, which he delivered to another pixy, who carried it off, and climbing up the vine that covered the side of the miller's house, laid the bouquet on the maiden's window-sill. Then he disappeared, followed quickly by the rest of the pixies, leaving the young man (who now saw from what quarter the flowers had come) to meditate on the matter. The result of his meditations was, that before another day was gone, he went to his betrothed and told her the doubts he had gone through, and the manner in which the pixies had freed him from those doubts; and the whole affair was then settled to the satisfaction of everybody concerned, including the pixies.

Stories of this sort are wonderfully poetical, and may amuse young folks, but they are two centuries out of date, and we may hope that matters are educationally in train to supersede them by materials quite as droll and a little more rational.

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A BUNCH OF KEYS.

I AM a professional man, and reside in the West End of London. One morning some few months back, my assistant on coming to attend to his duties produced a bunch of keys, which he informed me he had just picked up at the corner of a street leading from Oxford Street.

'Hadn't they best be handed over to the police?' suggested my assistant. I wish to goodness I had at once closed with his suggestion; but I didn't, much to my own cost, as will be presently seen.

'Well, I don't know,' was my answer. 'I rather think it will be a wiser plan to advertise them, if the owner is really to have a chance of recovering them; for to my mind, articles found in that way and handed over to the police are rarely heard of again.'

An advertisement for the *Times* was duly drawn up and sent off for insertion. It merely stated where the keys had been picked up, and where the owner of the bunch could have it returned to him on giving a proper description. The next morning the advertisement appeared; and though I half expected that some applications might be made later on in the same day, it passed over quite quietly. But the following morning I had a foretaste of the trouble that awaited me so soon as the postman had deposited my letters in the box and given his accustomed knock. A glance at my table shewed me that my correspondence was very considerably beyond its average that morning. The very first letter I opened was in reference to the advertisement; and before I had gone through the collection I found there were over twenty applications for the bunch of keys in my possession. Some of the writers took the trouble to describe the keys they had lost; but none of them were in the least like those that had been picked up by my assistant. Some did not take the trouble to give any description at all, or to state if they had been in the part of the town where the keys were found; and a few boldly claimed them on the

strength of having dropped a bunch miles from the spot indicated in the advertisement!

By the time I had got through my letters and my breakfast, my servant came to tell me that my waiting-room was already full of people—'mostly ladies,' he said—though it was nearly two hours before the time I was accustomed to see any one professionally. With a foreboding that a good deal of worry and a loss of much valuable time was in store for me, I entered my consulting-room, and gave orders that the ladies should be admitted in the order of their arrival. They were all applicants for the keys; and out of the sixteen persons that were waiting, fourteen were ladies. The two gentlemen were soon despatched. They had lost keys, near the spot for anything they could tell; but on being satisfied that what had been found did in no way agree with the description of what they had lost, they apologised for the trouble and went at once.

But it was no such easy matter to get rid of my fourteen lady-applicants. Some of them were for inflicting upon me a narration of family affairs that had not the most remote connection with the business in hand. A few kept closely enough to the subject on which they had come; but would not take a denial that the keys in my possession were not the least like those they said they had lost; and it was only at the sacrifice of some of my usual politeness that I was able to get rid of them. Not one of the morning's arrival could make out anything like a fair claim, and one or two owned that they had not even been in the quarter where the keys were found on the day specified.

More letters, more applicants, came as the day wore on; and I began heartily to repent of my well-meant desire to benefit my fellow-mortals by taking the trouble to find out the rightful owner of a lost article. I was just on the point of giving orders to my servant to put off all further applicants until the following morning, when he ushered in a comfortable-looking lady of middle age, who proceeded straight to business by at once describing with the greatest accuracy the bunch of keys that had given me so much anxiety that day; and

assuring me that she had passed the spot indicated in the advertisement on the morning they were found.

'Nine keys on the bunch, all Chubb's patent; three very small ones, five of various sizes, and one latch-key longer than any of the others.'

The description was perfect. Some of the other applicants had curiously enough been right as to the number, but wrong as to description.

I at once told my lady visitor that I had no doubt the keys were hers; and that I was ready to hand them over to her. But I ventured to add that it would give me greater security were she to permit my assistant to accompany her to her residence, and there, in his presence, to open the different locks to which the keys belonged. To this proposal not the smallest objection was raised. She begged I would call my assistant, as she had a cab waiting at the door. The direction was given to some place in Bloomsbury, and they drove off. In less than an hour my assistant returned. He stated that the lady opened the street door with the latch-key, and that the other eight keys opened desks, writing-tables, cash-boxes, &c.—all quite correct and satisfactorily. The expense of the advertisement was of course paid.

Congratulating myself that this troublesome business was well over, and mentally resolving that another time, under similar circumstances, I should act on my assistant's suggestion, and hand such matters over to the police, I gave orders that all applicants that might come were to be told that the rightful owner had been found and that the keys were disposed of.

Two days passed, and I had almost dismissed the whole affair from my mind. On the morning of the third day my attention was attracted by an alteration going on between my servant and an irate lady—well advanced in years—to whom he refused admittance. Anxious to escape disturbance, I gave orders that she should be shewn into my consulting-room, where I presently went to see what she wanted.

'I want to know why you never answered my letter about the bunch of keys you advertised as having found, and which I lost? I have come for them now.'

'But, madam, none of the letters described the keys accurately, and I was therefore not bound to notice any of the written applications that reached me.'

'Not describe them properly! But I can describe them; they were nine in number on the bunch.'

'So far, that is right, madam. Proceed with your description.'

The description was entirely wrong; and I told her so. I told her, moreover, that the rightful owner had been found, who had not only described the keys properly, but who had taken my assistant to her house and had used each individual key in his presence. I added that if she were not satisfied, I could furnish her with the address of the lady to whom the keys had been given up, and that she might call and try to establish her claim if she fancied she had one.

She was very far from being satisfied. She wanted to argue the matter further and, as I feared, to an unreasonable length. I told her firmly I could waste no further time on her; whereupon she left showing vengeance.

The threats of the old lady did not much disturb

me; but they were not altogether so unmeaning as I supposed, for in two days thereafter a summons was handed into me, demanding my presence at the police court of the district, to answer for my refusal to deliver up to the rightful owner property belonging to her, which I owned to having found, but refused to account for.

That I was very much annoyed may be easily supposed; but at the same time I could not help being somewhat amused, bearing in recollection how I had tried to satisfy the unreasonable dame, who had evidently more money than wit, seeing she was ready to waste it on so hopeless a case.

I duly made my appearance before the worthy magistrate, whom I happened to know slightly, and who could not restrain an amused grin when I was called forward. My assistant accompanied me as a matter of course.

The old lady had engaged a smart lawyer, who did his best in trying to make out a case; but his client rather weakened his statement by her inconsequential answers to both her counsel and the magistrate. My answer was easy. I shewed how the prosecutrix had utterly failed in describing the keys. I told that the rightful owner had rightly described them; and I put my assistant into the box to prove his having seen every key in the bunch fitted into its proper lock.

'Were you passing along Oxford Street on the morning that this bunch of keys was found?' asked the magistrate of the old lady.

'I was that way in an omnibus in the afternoon,' was the answer.

'But the keys in question were found in the morning, and were lying on the pavement,' remarked His Worship.

'Ah, I don't know how that might be,' said my persecutor; 'but I know I lost a bunch of keys.'

'Well, the case is dismissed; and you must pay expenses.' And so ended the case.

Now I have no doubt the old lady, though so wrong-headed in the claim she set up against me, had really lost a bunch of keys on the day my assistant made his—for me—unlucky find. Nor do I for a moment doubt the fact of some of the other applicants having also lost keys on the same day and perhaps near the same spot. But the applications by letter and personally numbered altogether not far short of fifty; and it may be set down as a moral certainty that they did not all lose, each of them, a bunch of keys on that particular day, and in Oxford Street—without being particular as to the spot. My theory is, that some of them had probably got their pockets picked of their keys while travelling by omnibus, and could not of course tell exactly where they lost them. Others may have simply mislaid their keys, and jumped to the conclusion that they were lost. Some others, I fear, had not lost keys at all, but merely came to my place out of idle curiosity. All of them, I know, gave me more trouble than I ever hope to have again in an affair of the kind.

[We can hardly say that the foregoing narrative, to call it so, is overstrained. It points to a marvellous want of logical precision in reasoning which is far from uncommon. Some years ago, in these pages, we mentioned a droll case within our own experience. One day we chanced to find a brooch, and advertised the fact in the newspapers.

Next day a lady called on us to say that she had lost a ring, and asked if we knew anything about it. 'Madam,' was our reply, 'you must understand that it was a brooch we found, and not a ring.' 'O yes, that may be so; but I thought as you were in the way of finding things, you might perhaps have seen something of my ring.' A very pretty example this of want of common-sense. Our advice to all who happen to find any article of value on the street is, to take it at once to the police office, where it may be reclaimed by the owner. Those who will not take this trouble, should let the article alone. Finding does not constitute ownership. We knew a gentleman, now deceased, who in the course of his life punctiliously refrained from picking up any article of value on the street, as the article was not his, and he might have been brought into trouble. This was being too fastidious, for it was allowing the article to be appropriated by possibly some dishonest person. True kindness and true honesty consist in lodging the article found, at the police office, whence, if no owner casts up within twelve months, it will be sent to the finder, whose lawful property it becomes.—Ed.]

THE LAND OF THE INCAS.

PERU recalls to every thoughtful student of history not only the half-barbaric splendour of the empire of the Incas, but the vanished prestige and glory of their Spanish conquerors. The gorgeous figure of Pizarro, the stately hidalgo, the successful captain, the ruthless soldier of fortune, meets us still at every step in the once rich Indian empire he won for Spain. On that low swampy mangrove-fringed stretch of coast, a tangle of vines and flowering creepers, the half-finished Castilian adventurer landed in 1524. And here, where the full tide of the Pacific rolls in upon the beach in columns of snowy foam, he, in 1535, founded Lima, the 'city of the kings.'

To examine the cities of the Incas, their ruined palaces, and other objects of note in this interesting region, was a task undertaken and carried out by Mr Squier, whose researches have been embodied in a volume entitled *The Land of the Incas*, the perusal of which enables us to offer the following items to our readers.

The coast of Peru is arid and barren, lined with guano islands, which although adding little to the charm of the scenery, are found as lucrative to-day as the mines of Potosi and Pasco were in the heyday of Spanish greatness. Thanks to this useful but unfragrant compost, Pizarro's city of the kings is still rich and flourishing, though the veins of silver are exhausted, and the golden sands no longer glitter with the precious ore, which fired the Spanish breasts of old with such fierce cupidity. It is very unhealthy, and although in the tropics, the climate for six months in the year is extremely damp and almost cold. Lima, which stands in an earthquake region, is built so as to sustain the least possible damage from the ever recurring shocks of those alarming phenomena. The private houses are never more than two stories in height. They have flat roofs and projecting balconies, and are constructed (one can hardly say built) of cane, plastered with mud, and painted in imitation of stone. Most of them have courts with open galleries in the Moorish style, extending along the

four sides; and many of them have towers, from which, in addition to the surrounding scenery, an extended view of acres of flat roofs may be obtained—the said flat roofs being piled with heaps of refuse, filth, and all manner of abominations; very often they are used as poultry-yards, and here the buzzards, which act as scavengers in all the South American cities, roost at night.

The furniture in the better class of these wicker and mud-built dwellings is often very fine: antique plate, velvet hangings, costly mirrors, and family portraits, that smile or frown upon you with all the charm or vigour the brush of Vandeyke or Velasquez was able to impart. The *paseos* or public walks are planted with trees, and the arcades, which are lined with fine shops, are a very favourite promenade. The inhabitants of Lima of all grades are remarkably fond of flowers, particularly of roses, which they contrive to keep in bloom all the year round. 'Roses,' Mr Squier says, 'bloom in every court and blush on every balcony, and decorate alike the heavy tresses of the belle and the curly shock of the zamba.'

Bull-fights are a favourite amusement, and so is cock-fighting, although it is no longer, as formerly, practised in the public streets.

The markets are well supplied, especially with fruit and vegetables. Fish is good and the butcherment of fair quality. The luckless traveller in Central America who could get nothing but chickens and turkeys to eat, and was afraid at last that his whiskers would transform themselves into feathers, may go to Lima with all safety, as a medium-sized turkey there costs twenty dollars in gold. The cookery is Spanish in its character, and consists much of stews savoury with oil and garlic and pungent with red pepper.

Twenty miles from Lima is Pachacamac, a sacred city of the Incas, where once stood a gigantic temple, dedicated to a deity of the same name, the supreme creator and preserver of the universe. The ruins of two large wings of this temple still remain, one of which contains a perfect well-turned arch, which is so rare a feature in American ruins that Mr Squier says 'it is the only proper arch I ever found in all my explorations in Central and South America.' Pachacamac was the Mecca of South America; and its barren hills and dry nitrous sand-heaps are filled with the dead bodies of ancient pilgrims, who travelled from all parts of the country to lay their bones, not their dust, in this hallowed spot. 'Ashes to ashes, dust to dust,' has no meaning here; the dead body does not decay, but is dried and shrivelled into a mummy. Mr Squier had the curiosity to open the shroud of what may once have been perchance an Aztec belle. The body, which was that of a young girl, was in a sitting posture, supported on a workbox of braided reeds, in which were rude specimens of knitting, spindles for weaving, spools of thread, needles of bone and bronze, a small bronze knife, a fan, and a set of curious cosmetic-boxes formed of the hollow bones of a bird. These were filled with pigments of various colours, and were carefully stoppered with cotton. Beside them was a small powder-puff of cotton for applying them to the face, and a rude mirror formed of a piece of iron pyrites highly polished. There was also a netting instrument and a little crushed ornament of gold intended to represent a butterfly. The long black hair, still glossy as in life, was braided and plaited

round the forehead, which was bound with a fillet of white cloth adorned with silver spangles. A silver bracelet hung on the shrunken arm; and between the feet was the dried body of a dead parrot, a pet no doubt in life, and sacrificed to bear its mistress company into the dread unknown land of spirits.

In the fertile valley of Canete, amid rich sugar-plantations, Mr Squier found vast pyramidal buildings, rising stage upon stage, with broad flights of steps winding round them to the summits. While sketching amid a maze of these massive shattered adobe walls, our author was startled by seeing three men suddenly leap over a low wall into the vivid sunshine before him. 'God and peace be with you!' he said as calmly as he could, instinctively divining that his best cue was to appear as cool as possible. 'God and peace be with you!' responded the bandits, for such they were; and after a little bullying, an amicable parley ensued, which had for its object the acquisition of Mr Squier's breech-loading rifle, a weapon which kindled in the bosom of Rossi Arci, the robber chief, an ardent, but with all due deference to Mr Longfellow, a wasted affection, for he did not obtain it. Four weeks afterwards, Mr Squier saw the swollen disfigured corpse of this bandit captain exposed to public view in one of the principal streets of Lima.

At Truxillo our author came across a treasure-hunter, one Colonel La Rosa. This man spent his whole life in burrowing like a mole among the old ruins in search of buried gold, gems, silver goblets, or any other relic of antiquity which he could turn into money. Under his guidance, Mr Squier visited a great pyramid called the Temple of the Sun, and the extensive, interesting, and well preserved ruins of Grand Chimn. Here he found vast halls, the walls of which were covered with arabesques, and wide corridors from which spacious rooms diverged. The walls of these apartments were bright with vivid and delicate colours; and Colonel La Rosa shewed him where in the midst of them he had found a walled-up closet filled with vessels of gold and silver placed in regular layers one above the other, as if they had been hidden there in some dire emergency. Two vaults were also discovered filled with silver cups and goblets. The silver of which these vessels were composed was much alloyed with copper, and was so much oxidised that it had become exceedingly brittle. Mr Squier obtained possession of two of the cups. They have the appearance of being hammered out of a single piece of metal, are as thick as ordinary tin-plate, and are both adorned by the representation of a human face, with clearly cut features and a large aquiline nose.

About a hundred yards to the westward of the excavations which have revealed the half-buried palace of the ancient princes of Chimn, is a low broad mound, which has been found to be a necropolis, filled with bodies richly clad and covered with gold and silver ornaments. Many of the heads of the dead bodies found by Colonel La Rosa were gilt and encircled by bands of gold; and one body, that of a woman, was covered with thin sheets of gold, and wrapped in a robe spangled with silver fishes. Warlike weapons and agricultural implements, knives, war-clubs, lance-heads, and spear-points, with spades and mattocks

of different shapes, all of bronze, are found abundantly in the vicinity of these ruins; as are also specimens of excellent pottery, on which are modelled with spirit and fidelity representations of birds, animals, fishes, shells, fruit, vegetables, and the human face and form.

Leaving Chinu reluctantly, Mr Squier travelled down to the coast, along which he sailed, examining the coast ruins at Calaveras and other places, till he reached Arica, the port of Tacna.

This is peculiarly an earthquake region; and some of these subterranean convulsions are terrible to a degree which we dwellers in a temperate clime can scarcely even imagine. A notably dreadful and destructive earthquake was that of 1868, which shook to its base all the adjacent country. It was first noted in Arica about five o'clock in the morning, its premonitory symptoms being immense clouds of dust, which were seen slowly advancing across the plain in dusky columns at a distance of about ten miles.

Nearer and nearer they came; and in the awful pause of dread expectancy that ensued, the distant snowy peaks of the Cordilleras were observed to nod and reel, as if executing some horribly suggestive cyclopean dance. Gradually this impulse extended itself to the mountains nearer to the town, till the huge *morro* or headland, a little to the left of it, began to rock violently to and fro, heaving with sickening lurches, as if about to cast itself loose into space, and always bringing to again, like a hard bested ship in a driving tempest. As it worked back and forward, huge fragments of stone detached themselves from its cave-worn surface, and fell with deafening crash into the surf below; while under and above all, like a subdued monotone of horror, was a prolonged incessant rumble, now like the roll of distant thunder, but ever and anon at irregular intervals swelling into a deafening crash, like the discharge of a whole park of artillery.

As far as could be seen, the usually solid earth was agitated by a slow wave-like motion, which became first tremulous, and then unspeakably violent, throwing half of the houses into heaps of ruins, and yawning into wide chasm-like fissures, from which mephitic sulphurous vapours issued. Shrieks and groans of anguish filled the air, a mournful interlude shrilly resounding at intervals above the subterranean thunder, as the terrified crowd rushed to the mole, to seek refuge on board the vessels in the harbour. Scarcely had they reached this hoped-for haven of safety, when the sea, treacherous as the heaving land, glided softly back, and then rushing forward with a terrific roar, submerged the mole with its panting terror-stricken occupants, and poured on in a foaming flood over the prostrate town, where it completed the havoc the earthquake had begun. It then rushed back almost more suddenly than it had advanced, the whole fearful deluge occupying only about five minutes. Again and again the earth quivered and shook, as if about to rend asunder and drop into some unfathomable abyss below, and again the sea dashed forward as if in frantic fury, and then as suddenly recoiled, the last time shewing a perpendicular wall of water forty-five feet high, capped by an angry crest of foam. This tremendous wave swept miles inshore, where it stranded the largest ships then lying in the harbour, one of them a United States frigate.

In Arica Mr Squier equipped himself for a journey over the Cordilleras. Nothing can exceed the savage wildness of these mountains, or the difficulties and dangers of the long narrow passes that intersect them. Mr Squier says: 'I have crossed the Alps by the routes of the Simplon, the Grand St Bernard, and St Gothard; but at no point on any of them have I witnessed a scene so wild and utterly desolate as that which spreads out around La Portada.' It is the very acmé of desolation—treeless, shrubless, bare of grass, with scarcely a lichen clinging to the rugged sides of the huge cliffs. Pile upon pile towering to the sullen skies, rise ridges of dark-brown hills bristling with snowy peaks, from several of which long trails of smoke stream lazily out upon the air, showing where the pent volcano surges in ominous life beneath the wintry wastes of snow.

Descending from the Cordilleras, Mr Squier examined Tiaguannco, the Baalbec of the New World; and from thence proceeded to Cuzco, the City of the Sun, the ancient capital of the Incas, which abounds with memorials of their vanished greatness. Here stood a magnificent temple of the sun, which was lined throughout with plates of gold, two of which, preserved as curiosities, were shewn to Mr Squier. The huge stones composing this and other massive buildings which yet remain are cut and fitted together with a precision which has been equalled, but never surpassed. So accurately do they fit, that it is impossible to pass the finest-bladed knife between their edges.

In close proximity to these splendid ruins, sometimes under their very walls, our author found rude circles of stone, such as still exist at Stonehenge and in other parts of Great Britain, and in Brittany. Bidding adieu to Cuzco and its suggestive relics, Mr Squier in his journey to the coast passed over a stupendously high swinging bridge formed of cables of braided withes. This dreadful rope-cliffs swung freely in space between two gigantic cliffs, which guarded like twin sentinels the rush of the deep and rapid Apurimac, one of the head-waters of the Amazon. It was something worse than the most breakneck defile among the Cordilleras. 'Never,' says our author, 'will I forget this experience. I can see still the frail structure swaying at dizzy height over a dark abyss filled with the deep hoarse roar of the river. My eyes grew dim, my heart faint, my feet unsteady as I struggled across, not daring to cast a look on either hand.' It was no wonder that the nerves of one of the party, an artist, were so shaken that he declared that rather than set a foot upon it, he would swim across the Apurimac. This he did, and found the water so delightfully cool and pleasant, that he resolved to prolong his bath, and placed the bundle containing his clothes and shoes on a convenient cliff, whence a perverse gust of wind blew them into the water. Long he pursued them, with no result except the conviction that he had lost them irrecoverably and his way as well. In this condition, foodless, garmentless, he wandered about for three days in pathless thickets. His feet were cut and bleeding; and his body, scratched and torn, was scorched all day by a blistering sun, and so chilled at night by the cold breezes that he was glad to bury himself in the warm sand. On the fourth day he staggered, faint with fatigue and hunger, to the door of an

Indian hut, and the inhabitants mistaking him in his ghastly squalor for the incarnate genius of fever, which they dread above all things, half killed with stones what little life was left in him before they would listen to his story.

Mr Squier's researches abundantly shew that, possessing no written language, the Incas have impressed their history in characters which yet remain upon the scenes of their former glory. Their greatness may be traced in the splendid ruins of their temples and palaces. Their civilisation is abundantly proved by their bridges, roads, caravansaries, reservoirs, aqueducts, and perfect and extensive system of irrigation, by means of which vegetation was carried in terraces thousands of feet up the steep hill-sides, and the now desert coast blushed like a garden with the profuse luxuriance of the tropics. One may well ask, which were the barbarians, they or the Spaniards who soon made a Sahara of that which they found a Goshen? Their great fortresses bristling on every hill-side teach us alike the vastness of their military power and their great resources. Of their internal polity we catch a suggestive glimpse from their ample prisons; and we learn how they lived as we turn over curiously their household and agricultural implements, or mark with mute surprise the exquisitely fine texture of some mummy shroud, or the delicate carving on some long-buried goblet, or the graceful form and excellent workmanship of some fragile relic of earthenware. We can even make a guess, as we look at their burial towers and tombs, at the current of national thought on one important subject. They who laid the dead so carefully, so tenderly to rest, believed that in the far-off world of shadows the soul would live again.

A CAST OF THE NET.

THE STORY OF A DETECTIVE OFFICER.

CHAPTER III.

THERE was nothing for me to do, that I could see, for a day or two, beyond improving my acquaintance with the factory hands, and keeping my eyes open generally; and in pursuance of this latter branch of the business, I got up very early on the following morning, and sat for an hour or two after daylight in the arbours or boxes I have so often mentioned. There was one great charm about the *Anchor*. It was low and dirty, decaying and disreputable, and the landlord was a drinking fellow, utterly bankrupt and hopeless, who troubled himself about nothing. His potman was sottish also, and too accustomed to riff-raff and queer doings of every kind to trouble himself about me; so I was thoroughly at my ease. All I saw which appeared worthy of notice was that the ill-tempered ferryman rowed out alone to the ship I have spoken of, and disappeared round its bows. I watched for some time, but did not see him come out into mid-stream; but just before I gave up my watch, he came into sight again. Whether he had crossed after rowing up a bit and had come back, or whether he had been lying all the time just hidden by the ship, of course I could not say.

I had told the potman that I was in hope of

seeing a friend of mine who was going to Australia and had half promised to take me with him. I consequently shewed a great deal of interest in the craft, and asked him lots of questions about them. This morning I guessed that the ship (the ferryman's ship), was an Australian liner; and this was just the joke for the potman, who laughed till his beery cheeks shook again at my mistaking a slow old Dutch trader for an Australian liner. He was quite severe in his way of poking fun at me; but he ought to have pitied my ignorance, not ridiculed it—and so I told him.

I thought I would pass away the morning by going over to T— and watching Mr Byrle's house. I had learnt that he was to be from home all day; Miss Doyle had told me so herself; so I knew she knew it also; and if she had any suspicious visits to pay, or queer company to receive, now was the time: that was evident. Accordingly, I went to T— by rail as before, starting in the rain; but luckily, just as I got there it cleared up and the sun came out. To give me a chance of learning something, I got asking my way to a lot of places I didn't want to go to, just by way of starting a conversation, you know; and the man I pitched upon was employed in the goods shed of the railway, but did not seem to have much to do just then; and when I asked him if he could spare time to run across to the public-house with me, he said yes, he thought he could; and he did.

We could see Mr Byrle's house from this place, so it answered as well for me as any other; and while I was talking to the porter, I saw a tall young fellow, good-looking, but rather flash-looking too, go past, and in three or four minutes I saw him ring at the gate of Mr Byrle's house.

'Hollo!' I says to my railway friend, 'isn't that Sims Reeves? Does he come down here to give lessons?'

He was no more like Sims Reeves than I am, but his was the first name I could think of.

'Sims Reeves!' says the porter; 'why that's young Mr Byrle, as gives his father no end of trouble. You wouldn't see him there, only the old gent is off somewhere for a while. He went from our station last night.'

'Indeed!' I said (and then I saw the young man go into the house); 'and what's the quarrel about?'

'Oh, his goings on,' said the railway man. 'Why, I have heard that his father has paid thousands on his account; and if he hadn't paid one time pretty heavily too, this young fellow would have been in Newgate for forging his governor's name. He's agoing abroad, I believe; and a good riddance too, I say.'

'And what does he do at the house when his father is away?' I asked; and I really felt that our conversation was getting quite interesting.

'Well, it's the old story; a lady's in the case,' said the porter. 'There's a niece there that's over head and ears in love with Mr Edmund—that's his name—and he pretends to be equally sweet on her. But if she had seen only as much of him as we have seen at this here station, she would never— There's my foreman agoing into the shed! Excuse me.' With that the railway-man finished his pint and was off.

I considered a minute, and then decided I was as well off where I was as anywhere; so I borrowed yesterday's *Morning Advertiser* of the

barmaid, and sitting down where I could watch the house, pretended to read. If any one had watched me, he must have thought I was most remarkably interested in the Money Market, for I had that part of the paper folded towards me without changing for a good half-hour. At the end of that time the door of Mr Byrle's house was opened and the son came out. I was ready for a start after him, let him go in which direction he might; but he came towards the *Railway Tavern*, my post; straight on, nearer, nearer he passed my door. I peeped out after him, and saw him actually come into the tavern, entering by another door the compartment of the bar next to mine!

I was in the common place; he was in one of those divisions where 'Glasses only are served in this department;' and so on. There was some one there already, for I had heard the occasional clink of a spoon and glass, and a cough; but there wasn't more than one, for I had heard no voices. I now heard some one speak; I judged it to be young Mr Byrle, and I was right.

'Hollo, skipper!' he said, 'what have you been doing to your face? Have you been fighting?'

'Fighting!—Well, never mind my face; I don't want to talk about that; I shall settle that account some day,' said a voice. (I knew what voice; I knew what was the matter with the man's face.)

His surly tone seemed to shut young Mr Byrle up on the subject, for he gave a sort of forced laugh and said no more about it. 'When do you sail?'—for certain now. I must know to an hour to-day, for I don't like what I hear of things,' said Mr Byrle.

'Don't speak so loud,' said the other; 'you can never tell who is listening; and there he was more thoroughly right than he suspected. However, they dropped their voices so completely after this, that though I sat right up against the partition, I could hear nothing more than a stray word or so, out of which I could make no sense, until at last Mr Byrle said: 'Time's about up, skipper.'

'I suppose so,' said the other. 'Well, you feel quite confident about her then; her courage won't fail, you think?'

'Her courage fail? Ha, ha! skipper,' said Mr Byrle; 'you don't know her, or you wouldn't say that. She'll come with the material, you'll see. From first to last she's never wavered; and look what a penetrating mind she has got!'

'Yes; she's clever, I think,' says the skipper. 'Clever!' Mr Byrle repeated, with a deal of contempt in his voice—'clever! Who but her would have found out the scheme?'

'Hush!' said the skipper, stopping the young man, just as his conversation was getting, I may say, instructive and important. Then Edmund Byrle said his train was due, and posted off to the station.

A minute or so after I heard the skipper put down his glass as though he had emptied it, and then he too left. I followed at a little distance, and got into the same train with him, and got out with him, and still following, saw him go to the ferry, pick out, as I knew he would, the surly waterman; and I saw him rowed to his own ship, where the waterman left him and then rowed over to the other side. Very good. Then the skipper had gone to T— specially to meet Edmund Byrle;

and Edmund Byrle had gone there specially because his father was away; and— Then I couldn't follow it up any further.

I went boldly into the *Yarmouth Smack*, and not seeing Tilley anywhere about, I asked for him under the agreed name, and was told he had gone to work on Byrle's wharf; not for the firm, but for some lighterman who frequented the public-house. This looked well; and if I got taken on, as I expected, the next Monday, I thought it would be very odd if between us we didn't find something out. Yet my interest in the business seemed dying away, or drifting into altogether a new channel, for I could not believe for a moment that Miss Doyle and Edmund Byrle, and the skipper and the sulky ferryman, were all linked in with stealing a few paltry brass fittings.

I crossed over before the old ferryman came back, and had my dinner in the tap-room of the *Anchor and Five Mermals*. It wasn't a nice place for a dinner, and I was always partial to having my things neat and tidy, which was by no means the rule at the *Anchor*, and the company was not to my standard. I was late to-day, so I missed the factory hands; and there were only two men in the room with me; one was a costermongerish-looking rough in a velvet coat and fur cap, which was about all I could see of him, for he was asleep all of a heap in a corner. The other was a man who had his dinner in a newspaper, and took it out, whatever it was, with his fingers, till he had finished it and then went away.

I was glad when he was gone, and I had the room as I may say to myself; so I sent my plate away, called for a little drop of rum-and-water (the only thing you could get fit to drink at the *Anchor*), and lighting my pipe, sat with my feet on the fender, to have a good smoke and a good hard think. I had sat there perhaps half-a-dozen minutes, and had fairly settled down to my thinking, when a low voice said: 'Mr Nickham!' My name! It was a very low voice which spoke, but the roar of an elephant couldn't have startled me more. In an instant it flashed upon me that my disguise was seen through and all my plans understood. Robinson Crusoe was not so staggered when he saw the foot-print on the sand as I was on hearing these two familiar words. I turned round, and there was that miserable-looking rough that I thought had been asleep, standing up and making signs to me. He was a regular rough and no mistake, with short hair, an ugly handkerchief twisted round his neck; his nose had been broken at some time or another, and he looked a complete jail-bird. 'Mr Nickham!'

It was he that spoke; no mistake about it this time; and he put his hand up to the side of his mouth to keep the sound straight.

'Who are you?' said I; for you know I didn't like to answer to the name at once, in case he wasn't certain.

'My name is Wilkins—Barney Wilkins,' said the man. 'But you won't recollect me by that name; though I've been through your hands, sergeant; but I give some other name then. You got me twelve penworth for ringing in shoofuls.' (He meant that he had been sent to prison for twelve months for passing bad money. I wasn't surprised to hear it; he looked fit for that or anything bad. But if he got it through me, why he should speak to me now was beyond my compre-

hension.) 'I knowed you directly I see you, sergeant,' he says, coming nearer, but still speaking in the same hoarse whisper as at first; 'and though you're a tight hand, you're fair and square, and acted as such by me when you copped me. You are down here on business—you're after some rare downy carls. Now ain't you, sergeant?'

'If you know,' I said, 'what do you ask me for? And if you think I am what you say, you don't suppose I shall tell you my business, do you?'

'Sergeant,' he says, coming nearer still, 'you fought a man in the street last night, and give him a thorough good licking. You was the only man there as would take the part of a poor gal as wasn't doing no harm to nobody; and I respect you for it, sergeant; I do. That gal was my sister—my young sister, as has been like a child to me, and was so tidy and pretty that I was proud on her, and hoped— Well, sergeant, whatever we are, we all have our feelings; and Sergeant Nickham, I'll do you a good turn. Look here!' With this he except quite close and put his mouth almost to my ear. I watched him carefully, being much puzzled by his actions, yet I had seen such unexpected things occur in the police that I was quite ready to hear something of consequence from him. 'You are down here about that Bank paper, what is said to be all got back, but which you know it isn't. You are on the right parties, and it does you credit; but you'll never get them nor the paper without me.'

He stopped here, to see what I would say; but though I was ten times more surprised than ever, I kept my countenance, and only said: 'Well?'

In point of fact I didn't know what to say.

'I've had a lot of trouble and risk about that there paper. I got it from B—, and took the money for it to him, honest; and have been as near took with it in my possession as anything. Twice the slops (he meant the police; 'slops' is what we call 'back-slang,' a rough sort of spelling the words backwards)—twice they have come into my place when the stuff was there. Once I was sitting upon it done up like bundles of rabbit-skins. Now he gives me (the party wot I am down on)—he gives me five pounds, and I can't get no more out of him. And you see there ain't no reward out.'

'No, not regularly, Barney,' I said; 'but there's no doubt at all that any man coming forward would be very handsomely considered by the Bank people.'

'He might be, if he'd got anybody like you to speak for him,' says Barney. 'But you know, Mr Nickham, that I am wanted for a lot of things by the bobbies; and I have been through the mill so often, that without I've got a friend I don't half like touching 'em again. But you're fair and square, and you licked the fellow last night; and I'm told you can box better than even Tom Sayers could; and if that's so, I'll trust you. And this here man won't give me more than five pounds; and he has settled with a regular fence, a sort of Dutch-Yankee skipper, what pretends to command one of them traders out there.'

'Yes, yes,' I said; 'the man I fought last night. I know him.'

'Him!' almost screeched the man (although, mind you, he never once forgot his hoarse whisper); 'was it him you licked? Sergeant Nickham, I'd go

through fire and water for you now, for I hate and despise that wretch; and if I had got a chance to do it safely, I'd have'— He checked himself very sudden here, as if what he was going to say wasn't exactly the sort of thing to say to a detective. 'I see you are on the right lay,' he begins again; 'but I tell you he has settled with that skipper to have the stuff put on board, if it ain't already there; and then he'll go with it to whatever foreign port the craft comes from.'

'And who is he,' I asked, 'who has arranged with the skipper?'

'Ah, Mr Nickham,' says Wilkins, with a very cunning look, 'as if you didn't know! Haven't you been on the lurk round his house for two days past? Wasn't you there this morning?'

'Egad! I saw it all now! You might have knocked me down with a feather. I could hardly help saying something which would have shewed my astonishment; but I choked it down, and quite determined to keep the upper hand with him, I said as cool as I could: 'Now, Wilkins, no beating about the bush, or making me help you out. If you've got anything to say, any name to mention, out with it like a man, and I'm your friend. You understand me.'

'Fair and square you are, Mr Nickham,' says Barney; 'and so you'll find me. That young Mr Byrle has got the paper, and he means to go out with the trader. There is people over in Holland awaiting anxious for it; and if once they gets hold of it, it's all U. P. with our bank-notes. Now, I don't know where the paper is; if I had known, bust me if I wouldn't have blowed the gaff long ago!'

He meant that he would have exposed the whole transaction, and I noticed that this declaration did not quite agree with his anxiety to have a friend on his side, a point on which he had dwelt so much before; but that didn't signify.

'Now, Mr Nickham,' he went on, 'you must board the craft when the paper is shipped, if it ain't there yet.'

'It ain't there yet, my man,' I said, remembering what had dropped from Edmund Byrle, that 'she would come on board with the material.'

'Then I think it will be to-night,' he continued; 'for a sail-maker as has been at work aboard her says she drops down the river to-morrow; and I think by what I can learn in other quarters, he is right.'

I thought so too, and at once made up my mind that the meeting at the *Railway Tavern* was to settle about shipping the paper.

'I can give a pretty good guess at the man they will engage for the job,' says Wilkins.

'I know him,' I said; 'a tall, sulky-looking, bony-headed old fellow, with a game eye.'

'Why, Mr Nickham,' says Wilkins, 'you're a wonder, a perfect wonder! You're a credit to the force, and Sir Richard ought to hear of it! Why, that's the man, the very man; and here have you only been down two days, and know all about it! Keep your eye on him after dark, and you're all right.'

We had some more talk after this; and then he pretended to go to sleep in his corner again, and I went out.

I went straight into the City and saw some of our chief people, who sent over to the Bank. They would not chance my going there, for fear

of somebody seeing me that had better know nothing about it. The gents from the Bank could hardly believe their ears, and the compliments they paid me, to be sure! It was decided that everything was to be left in my hands, and I was provided with letters to the right parties at the water-side. But I need not go into any further particulars of that kind.

I was not going to trouble myself any more just now about the pilfering at Byrle & Co.'s factory; as far as I was interested in it, the thieves might take boilers, wheels, chimneys, and all. I took up my post in the old arbour, and there, though the rain came steadily down, I sat. I managed to get a pretty dry corner; and with a little of the *Anchor's* rum-and-water and my pipe, I made myself tolerably comfortable while I sat and watched the Dutch trader. I was well screened from the sight of any one below, or else my corner would not have suited; and although I could hear the steps and the voices of the people going to the ferry, and could have touched them by leaning over, yet they could not see me.

The bony ferryman, in his tarpaulin coat and hat, was there this afternoon; and very sloppy and miserable all the boats looked; and as the tide fell lower and lower, the great broad bed of river-mud grew broader, and the path to the ferry-boat grew longer, and still I kept my watch, and meant to keep it. I must own, however, that I did not expect to see anything worth notice, for what could there be? But sometimes, you know, in our business, it is as necessary to watch to make sure there is nothing being done, as it is to make sure that some important movement is going on.

There was an oyster-smack not fifty yards from me as was left on the shingle or mud when the tide went down; and there was a man smoking his pipe on the deck of that oyster-smack, just as I was smoking mine in the arbour; and when night came, and the river got dark, and you couldn't make anything out of it but a great black space, with a hollow sound of the wind moaning over it and of the water lapping on the shore as the tide rose again—then there was a lantern burning on the deck of that smack, and there was a similar lantern burning in my arbour; but the light was shewn open on board of the smack, and mine was a dark-lantern (so was the other) with the light hid. But I was perfectly well aware that the man aboard that smack never took his eyes off me while it was light, and that after dark he watched to see if I shewed my lantern. I didn't shew it; but if I had, there would have been a Thames police galley and five armed constables alongside of that hard in a couple of minutes.

AN EXTRAORDINARY PROJECT.

IN the city of San Francisco resides Mr Hubert Howe Bancroft, a gentleman about forty-five years of age, formerly engaged in commerce, but now retired from business, in order that he may devote his whole life, as well as the wealth which he had amassed, to the furtherance of a project which he formed some sixteen years ago. This was no less comprehensive a task than the compilation of a full history, as well as a scientific account, of all that vast district west of the Rocky Mountains, which, stretching from Panama to Alaska, embraces Central America, Mexico, and California.

It was to be in a popular form, and to embrace every point of interest that could be ascertained respecting the Pacific States, their aboriginal inhabitants, their successive civilised occupiers, their geology, botany, and other natural features. First of all in this stupendous task comes the history of the native tribes—to be completed in five volumes, the first instalments of which are already published by Messrs Appleton and Co. in New York, and by Messrs Longmans in our own country. These will be followed by a history of the States from the Spanish Conquest down to contemporary times, and for this portion of the work it is thought that some twenty volumes will be required. A third series will treat of the geological structure of the territory, its minerals especially, and of mining operations. Physical geography forms the fourth section of the proposed work, whilst the fifth will deal with agriculture; and the sixth with bibliography. It must be apparent that a man must be of a highly sanguine temperament to imagine such an enterprise; it will be well if he live to complete only a portion of it; and should he really succeed in doing what he wishes, he will have earned for himself an honourable distinction, and conferred on the world an extraordinary boon.

But how was such an undertaking to be begun? Where were the materials; and even granting that they were to be procured, how was such a mass of general reading to be consulted, to be utilised? Mr Bancroft's first step was to solve this difficulty. He decided to establish at his own cost, in San Francisco, a library of reference, which should contain all the books to be had for money which could throw any light on the subject. With this end in view, he appointed agents in all the principal cities of the world, whose business was to frequent sales, examine book catalogues, and effect the purchase of any volumes which seemed likely to contain useful information. Of course by such a system many books were transmitted to headquarters which ultimately proved to be of little or no value; but this was inevitable in the course of purchases of such magnitude. And notwithstanding all drawbacks of the kind, the collection has gradually increased, until it is said now to consist of between eighteen and twenty thousand volumes, including pamphlets; whether this number also includes manuscripts, we are unable to say. The acquisition of these works has been occasionally furthered by adventitious circumstances. The Mexican war, for instance, was the means of throwing in Mr Bancroft's way some highly valuable documents, which, under favourable circumstances, would have remained the property of their lawful owners; these, contained in four volumes, are a set of parchment records of the Church in Mexico between the years 1530 and 1583, and apart from their historical value, have an interest to the bibliophile as containing autographs of many celebrated men, amongst others of Philip II., Torquemada, Las Casas, and Zumarraga, first Archbishop of Mexico. This last-named worthy is notorious for his act of insensate bigotry in destroying the Aztec records, and thereby depriving the world of the history of that race; he burned the hieroglyphic paintings of Anahuac in the public square of Tlatelolco, much as Ximenes did with eighty thousand Moorish manuscripts in Granada. These priceless records were

stolen from the government archives! When the unfortunate Emperor Maximilian's library was sold, many valuable works were also obtained from that collection, which had been gathered together during a lifetime by a well-known amateur, Count Andrade.

The weakest part of the arrangement of Mr Bancroft's undertaking is the manner in which the books are housed, but this is probably an unavoidable evil; they occupy the fifth story of the owner's house in Market Street, San Francisco, where they are exposed to all the risk of fire, to say nothing of the inconvenience of such a plan. The apartment in which they are kept occupies the whole length of the building, and the books are arranged upon shelves reaching from the floor to the ceiling, and running from one end of the room to the other. Let us now see how it is proposed to utilise this mass of literature for reference.

No one but a resolute enthusiast with an abundance of means could have brought this extraordinary project into shape. The trouble spent in the undertaking has been enormous. Of course, the projector has a staff of assistants possessing the requisite accomplishments, headed by a librarian, Mr Oak, who has been indefatigable in producing a catalogue of the works collected, with copious subordinate references. So aided, Mr Bancroft, as we understand, has begun his literary operations; but whether he will live to complete his colossal production in proper artistic style must necessarily be left to conjecture. Fortunately, besides being still in middle life, he is said to have splendid bodily health and great powers of endurance, both of which must stand him in good stead. He always writes at a standing desk, and sometimes prolongs his hours of labour to as many as eleven or twelve—which seem to us excessive. Such application may do for work which is chiefly compilation; but any brain-worker knows that it is simply impossible to do really valuable work throughout such a time. As a matter of fact, very few men can read or write hard for more than six hours a day with profitable result. Let us hope, however, that the man who has had courage to undertake such a task, will have self-restraint enough not to endanger its success by an undue straining of the faculties, which must be kept in full repair to insure its accomplishment. We should be sorry to hear that any disaster from fire had put an abrupt termination to so well-meaning, though we may be allowed to call it a somewhat eccentric undertaking.

GORDON.

SHE came on towards me, her trailing draperies falling round her with the soft grace she gave to all she touched. Sunshine was on her beautiful hair—evening sunshine, which turned the wreath of plaiits she wore into a crown of burnished gold. She came floating on, through the flower and fruit gemmed orange trees, through the crimson and pure white camellia bloom; violets grew beneath her feet, and she seemed to me part of the glory and the fragrance of the sunset and the blossoms.

Below the terrace where I stood, lay the sea, where blue faded to green, and green to opal, melting into one deep far-stretching mystery of purple

light and banks of golden cloud. Palaces and domes and tapering spires shone white against the dark background of distant mountains. Suddenly the music of many bells rung out on the still air, their chiming softened by distance into low faint sweetness. They were the bells of the stately marble city that shone so fair across her gleaming bay. The first bell-notes were taken up and echoed by the bells of chapels in villages along the shore; of convents hidden away in country dells and valleys, till the air was full of lingering prayerful sound. Through it, through the magical Italian twilight came the woman I loved. She came and stood beside me, looking across the water to where Genoa's palaces glimmered against the sky; but I do not think she saw or thought of them. There was a dreamy look in her eyes, a cold, set weariness about her mouth, which is only seen in those whose thoughts have drifted far from where they stand.

'Are you tired of this place?' I at length ventured to ask her.

'Not particularly,' she answered; 'you know I never care much where I am.' The words sound petulant; but said as she said them, they were only weary. I should have been glad if she had ever shewn impatience; anything rather than the cold quiet which ever lay upon her beauty like a pall. At first, in my triumphant happiness at having won her promise to be my wife, this coldness had not chilled me—as it sometimes did now—to the heart. I so longed, so hungered for a word of love, for a tender look. All her stately beauty would soon be mine, and it seemed still as far from me as ever.

We leaned on the low parapet of the terrace, while the music of the bells died away, till only the slow beating of the waves broke the stillness. It was an hour of wonderful peace and beauty, yet a strange sense of unrest took possession of me, and jarred the music of the waves and the restful quiet of the twilight. Standing there close to her, with the certainty that soon she would be my own for ever, a vague thrill of fear came over me, a fear lest all this feverish joy of knowing she was mine, might vanish away, and leave me a lonely mortal. This love for her had become to me an all-absorbing passion; and yet she never for one moment allowed me to think that my love was returned. Perhaps it was the might of her beauty that filled my senses; yet I have seen beautiful women since, and had seen them before I first saw her on the walls above the old Etruscan gateway at Perugia.

One morning the week before, I had strolled out from the dull hotel; and leaving the street with its tall houses and quaint old fountain, glowing in the day's first freshness, I sauntered on to the walls, and there I first saw her. Below in the valley the silvery olive leaves trembled in the sunshine; wreaths of broad-leaved vines clung to the gray old trees, clothing them with a borrowed beauty of youth and freshness. Hundreds of

flowers blushed in the light, and varied odours from herb and blossom filled the air with a subtle languor. Above, on the lichen-covered wall, with a background of purple mountain, a fitting frame to her stately loveliness, she sat, looking out across the sunlit land, with the dreary far-away look in her great deep eyes, and the haughty coldness upon her chiselled face. I lingered about, drinking draughts of beauty; fancying it was my artistic sense that kept me there watching her face, till she rose wearily, and slowly walking down the street, entered the hotel where I was staying.

I found on inquiry that a Mrs Vereker and her niece, Miss Mayne, had arrived there the previous evening. I had sometimes met Mrs Vereker in London; and later on in the day, while I was carelessly examining the carving on the fountain in the square I saw her and my vision of the morning standing on the cathedral steps. Mrs Vereker came forward with that friendliness we feel for a slight home acquaintance whom we may chance to meet when abroad. So I joined them, and we strolled on chatting over home news. Miss Mayne seldom spoke, and yet that walk seemed to me a strangely happy one. Mrs Vereker told me they had only been a day in Perugia, and had intended going on at once to Rome; but the mountain air and mountain views were so delightful, they had changed their minds, and intended remaining for some time at Perugia.

I had come to the old town to study art; to search the blazoned manuscripts lying hidden in sacristy and convent, and learn from them their secrets of colour and design; to wander through frescoed church and palace, where walls and ceilings are brilliant still as when the hands which wove their gorgeous stories first laid the pencil down and thanked God for the great console—Art. I had come to watch the mists rising from the valleys, and wrapping the mountains in soft mystery of cloud—cloud which changes and shifts, and melts at last into the golden and purple, the opaline green of the sunrise; so that I might try to wrest from Nature a faint touch of her magic of shadow and light, of colour and form, and lay it at the feet of the one mistress I had ever known—Art.

What I was now studying was a woman's heart—and what I learned was—nothing. I do not think mine is an impressionable nature. I had spent thirty years in the world, and had never loved any woman until I saw Mary Mayne in the morning light sitting above that old gateway; yet in one short week I had grown to love her—well, as few women are ever loved.

At the end of that week came a letter from Willie Vereker, saying his yacht needed some repairs, and he would put in at Genoa for a few days if his mother could meet him there. He had been to the East, and she had not seen him for some time; so she decided on going back to Genoa; hoping the *Gwendoline* might need more repairing than Willie thought, and keep him there longer than he expected. The evening of the day Mrs Vereker received that letter, I told her of my love for her niece, and asked permission to accompany them to Genoa.

She regarded me with an odd look of compassion. 'Have you spoken to Mary yet?' she asked.

I told her I had not; I wished to wait until we had known each other longer; I feared being too precipitate.

'Then,' said Mrs Vereker, 'I have no right to tell you anything of her story. It is a sad one, poor child! and I warn you, you have little chance of success. If you choose, you can come with us to Genoa; but if I were you, I should not do so. Save yourself while you can. You have known her a very short time. If you leave us now, you will soon forget her; later, you may find it a more difficult task.'

I shook my head. The advice came too late. I went with them to Genoa. The stately marble city had a charm for us all. Mrs Vereker had her son, and the two found marvellous attractions in the quaint narrow streets with their palace portals, their courts and halls, where fountains sparkled and fang diamonds of spray round the brows of pure fair statues; where in the coolness and the shadow, gold-laden orange trees and thick masses of crimson blossom gleamed with sudden startling glory.

I had my idol. Day after day I was by her side. It was a fool's Paradise perhaps; but I suppose there is such an Eden in every life; and looking back, when we have left its short-lived peace, we vainly long for a single throb of its rapture. So, during those quiet days at Genoa, each of us, except Mary Mayne, had our heart's desire: Willie, the life, the colour, the loveliness he and his *Carolanne* sought in voyages to many lands; Mrs Vereker, her son; I, my new delicious joy. There, on the terrace where we were standing, I first spoke to Mary, and heard her tell me my love was hopeless. She told me her story.

Her wedding-day had been fixed. In a year she was to have been married to a man she loved with her whole heart; when the war with Russia broke out, and Gordon Frazer's regiment was ordered to the Crimea. He and Mary wished to be married before he left, but family reasons prevented it, and so they parted. He had never returned to England. A soldier brought Mary a little locket which she had given Gordon. The ribbon it hung upon was thickened here and there with deep dark stains; and the man said Gordon Frazer had given it to him to take to Mary, when the young officer lay dying after the charge at Balaklava. It was only the story of many an English and many a Russian girl during that dreadful time. When a strong, self-contained nature breaks down, it is almost utter collapse; so it was with Mary. For months she lay silent, tearless, listlessly unable to make the slightest exertion, to take the smallest interest in life. Her friends thought her brain had suffered from the shock; and when she recovered sufficiently to travel, Mrs Vereker had taken her abroad, where they had been moving from place to place ever since. Her body regained health; she was now quite strong; but the girl's heart and soul seemed dead; as she said, dead, and buried in Gordon Frazer's grave. Yet as I listened I did not despair. I had no living rival; he was dead, this man she loved; while my heart was beating, living, and strong with its worship of her. If I could only win her to be my wife, the dead love would pale and faint before my real and passionate devotion. So I hoped, as day by day I watched her every look, forestalled her every wish, until she grew

accustomed to my presence, and to rely upon my care. My hopes were answered; ere long I won her reluctant consent to be my wife, but on the condition that our marriage should not take place until their return to England next year.

The rosy clouds were fading into the deep purple of Italian night. Silence fell around us as a mantle; only the throb of the sea below the terrace broke the intense quiet. Out on the sea shone the white sails of a little yacht. Nearer, within the harbour, rose the masts and spars of many ships, mysterious, spectre-like, as ships always look at night. As we were seated in calm enjoyment of the scene, a small boat shot out from the rocks beneath our feet, where lay some hidden cave or landing-place. It was rowed by two men; a third sat wrapped in a large cloak in the stern. They rowed well, and the boat was nearly a mile from us, leaving a bright line of light upon the shining water, when a cry broke the calm of the night—a wild, weird cry, with agony in its tone. 'Gordon!' I have never heard its like since, and I hope I never shall again. In its agonised tone I could scarcely recognise the voice of Mary, so changed was it, so shrill with long pent-up yearning, as it wailed out that one word—'Gordon!' The cry seemed to be repeated again and again, though softened by the echoes, while the little boat sped on its way, and its passengers—mere dark specks they seemed—climbed into the yacht. The white sails gleamed against the horizon, and then, phantom-like, were lost in its dim purple.

I turned and looked at Mary. She stood with her eyes fixed on the darkness which hid the yacht from sight, her hands clasped upon her heart, her face drawn and colourless. I feared the fate her friends dreaded for her had stricken her as she stood beside me there in the still luxurious twilight. 'Mary, my dearest, my own! what is it?'—taking her hand and drawing her closer.

She drew her hand from mine, and shuddering away from me, leaned against the stone parapet, resting her head on the cold marble coping.

'You are ill; let me take you home, darling,' I said.

'No,' she murmured; 'not ill. But oh, she exclaimed, 'Harry, Harry! my good kind friend, help me! *Gordon was near us just now*. I felt it; I am sure of it. You will help me to find him; will you not?'

Help her to find him! I help to break my own heart—to bruisé this new-found awesomeness of my life! The very thought struck me with a sudden chill. What if this fancy of hers, coming so close upon my sure forebodings, should be a reality? What if Gordon Frazer were still in existence? I thrust the thought from me as I should thrust a temptation. 'I will help you in any way I can, my darling,' I said; 'but come in now; the night-air is chilling; and you are giving way to feverish fancies.'

'No,' she said; 'it is no fancy.' Drawing herself up wearily, she turned without looking at me; and I followed her down the terrace and across the marble court of the old palace which was our home in Genoa. I watched her glide, stately and pale and quiet, up the broad white staircase.

It was months before she recovered from the

brain-fever in which she awoke next morning—such awful months, during which we often feared the worst. Yet when they were over, and she was among us again, paler, more fragile, but still her own beautiful self, stately, self-possessed as usual, I was almost thankful for the terrible illness, which proved that her cry and wild words on the terrace were but warnings of coming illness, the mere wandering of a brain diseased.

The Roman season was nearly over, yet Rome was full—full of English sightseers, like ourselves; full of Americans, on rapid flight across Europe; of eastern prelates, in flowing eastern robes, with olive-hued eastern faces; of eager-faced French ladies, and solemn-eyed peasants from lonely villages on the Campagna, and of Italians from city and from plain; for it was Easter-time. We were only waiting until the conclusion of the festivities to set out on our journey home. Home! I never until now felt half the meaning of that word. When we got home, Mary and I would be married. I should give up wandering, and settle down into a country gentleman. I thought with a pang of self-reproach of the grand old home which called me master, shut up in desolate state since my dear father died. How a fair young mistress would brighten and beautify the old rooms. I could see it all now—the oaken hall with its quaint old pictures; spring sunshine pouring in at the open door, red-coated sportsmen grouped under the beeches, horns ringing from the corpses, children playing under the shadow of the avenue of limes—the loveliness of joyous life, where for so long had been the silence left by death. It was a sunny dream of home—home in fair England, into which I had fallen; standing there, upon the Pincian, under the deep dark blue of Roman night.

Below lay the city, its narrow streets dimly mysterious, no light visible in their tall houses; the fountain murmured its sweet monotonous music in the Piazza di Spagna; the wide white marble steps gleamed along the hillside; tall palm-trees cast weird shadows across the gravelled walks; nightingales answered each other in low rich trills of song, echoing from tree to tree, through whispering palms and odorous night-flowers. Beside me, cold and silent, was the woman whose charming spell woke within me this new sweet longing for home—home musical with the soft rustling of women's garments; with the tender voices of little children. I suppose such a dream and such a longing come to all men at some time of their lives; it came to me that night as I stood above the city of vanished glories, of dead and buried dreams.

It did not last long. Suddenly, above the city roofs, a cross of silvery light shone out against the sky. The illumination of Saint Peter's had begun. Above the winding narrow streets, above palace roofs, above palm and cypress, above triumphal arch and mouldering temple, over the palace of the Cæsars, over Capitol and Forum, the silvery cross shone glad, triumphant; and from it, the light spread from window to window, from pillar to pillar, till the vast pile was one glory, changing slowly from soft silvery radiance into a glow of golden fire.

It was worth coming to see. Was it not, Mary?

'Mary!' A stranger's voice echoed her name; and instead of answering my question, she sprang with a low cry from my side, and laid her head upon a stranger's breast. 'Did you not get my letters? I have been looking everywhere for you,' I heard him say.

She did not answer, nor raised her head; as if at last she had found her rest.

'You are not alone here?' he went on. 'Who are you with?'

Then with a quiver as of pain, she raised herself, and looked from me to him with beseeching eyes and trembling clasped hands.

Before she spoke—for even in all the agony of my crushed-out hopes, my love for her bore down all other feelings, and I tried to save her from the pain of telling me what I already knew—I said: 'You have found an older friend than I am, Mary. Shall I leave him to take you to Mrs Vereker?'

'An older friend?' he repeated. 'By Jove! I should think so.'

Then raising his hat, he shook hands with me as I turned away.

I turned into the darkness, but not before I had seen that until now I had never known her, my love, my promised wife. I had known a beautiful statue, not the beautiful woman who, with eyes upraised to his, stood in the subdued light looking up to Gordon Frazer. All the coldness, all the stately calm had gone, fallen from her as a mantle falls—a mantle which had hidden the fullness of her loveliness, and had concealed from me a tender grace and beauty I had never till now beheld. I have never seen her since.

Some time afterwards I met a friend who had seen a good deal of the Frazers. He was loud in admiration of Mrs Frazer's beauty and of her devotion to her husband. 'He was out in the Crimea, you know, and was reported dead; but he was only wounded. Some Russian family, to whose house he had managed to be sent, had tended him with kindly care after even his own doctors had given up hope, and had pulled him through his danger. Mrs Frazer told me,' continued my friend, 'how one evening when standing on a terrace at Genoa, she heard his voice, and thinking it was a reproach from the grave, she was going to marry another fellow, she got brain-fever, and was near dying. The fact was, the yacht in which a friend had brought him from Constantinople touched at Genoa, and he had actually spent the day doing the palaces! When she heard his voice, he was returning to the *Peri*, which lay about two miles from the shore. Romantic story, isn't it? But Gordon takes her devotion coolly enough; the love seems more on her side than on his. I cannot understand that.'

Understand it? Yes, I could. Hers was one of those great-souled natures who like to give rather than to take, to pour out all the wealth and beauty of their being on the idol which they have clothed in all the glory of their own imaginings. God grant she may live on to the end, happy in her womanly idol-worship!

As for me, the dream I dreamt upon the Pincian Hill, before the cross of golden light shone over the city roofs, was never realised. No rustle of woman's garments makes low music in the old

oak-panelled rooms; no children's voices wake the echoes under the avenues of arching limes. The old Devon manor-house stands as yet without a mistress.

NARCOTISM.

In these days of medical knowledge, when so many merciful means for the alleviation of pain are known, it follows as a matter of course that great abuse of sleep-producing agents exists. We would therefore say a few words of caution as to the pernicious practice of people making use of chloral, chlorodyne, chloroform, and other kindred agents *without medical advice*. It is, we think, little known to how great an extent this evil exists. To come across a lady who is constantly more or less under the influence of chlorodyne, is by no means uncommon; every trifling ailment or passing *malaise* being an excuse for a few drops of that narcotic. Chloral is also extensively and improperly used; the more so because, unfortunately at the time of its first introduction as a sleep-producing agent, it was most erroneously stated to be perfectly harmless, and many are still under this impression.

The real truth is, that no narcotic of any kind whatever is harmless, but on the contrary, invariably pernicious when taken otherwise than by the advice and under the treatment of a medical man. True, sleeplessness is one of the most trying things a person can suffer from; but then there are other means of combating the enemy than by dosing one's self with chloral or any such agent; and thus making an infirmity chronic, which would in all probability have been only a temporary evil. Rely upon opiates for sleep, and sleep will not come without them. Thus a bad habit is formed; the bodily strength is undermined, the digestive powers enfeebled, the mind and intellect weakened and enervated, and the unfortunate sufferer becomes a slave, bound hand and foot to a habit that it is almost impossible to shake off. Sleeplessness often comes from want of sufficient fresh air and exercise, from over-mental work, mental distress, from too great a quantity of stimulants taken during the day, and from various other causes, which a little care as to diet and regimen would quickly overcome. Taking short naps during the day; too much tea and coffee drinking, especially shortly before bedtime—all these are apt to cause sleeplessness. In many cases a light and simple supper taken shortly before retiring to rest, and attention to the feet being thoroughly warm, will insure a good night's sleep when more energetic means have failed.

In those terrible abodes of suffering, our cancer hospitals, the means most resorted to, and most efficacious for the alleviation of pain, is the sub-cutaneous (under-the-skin) injection of morphia. In sciatica, neuralgia, and other painful nervous affections, this remedy is often exceedingly beneficial, when used under competent medical advice and supervision; but like every other good thing it is open to great abuse, and often made use of merely as a soothing narcotic by the irritable, excitable, and discontented. A long train of evils follows; but with these we are not called upon to deal here. What we want now to lay before the reader is a plain statement as to the prompt treatment called for in a case of over-

narcotism from too strong a dose of injected morphia. Coldness of the extremities, lividity of the countenance, profuse cold sweat, and loss of power over the limbs, insensibility, very deep breathing, and contraction of the pupils of the eyes to such an extent that they resemble a black pin-head, result.

What then is to be done? Time is precious, and perhaps half an hour or more may elapse before medical aid can be obtained. Taking it for granted that the patient is in a recumbent position, the first thing to be done is to raise the head, to sponge the face and chest copiously with fresh cold water, to rub the limbs steadily and strongly, to put hot-water applications to the feet and to the sides of the body, if it feel cold to the touch. Place strong smelling-salts to the nose; lay the head on one side with the mouth open, so that the tongue may not fall back and prevent respiration; give brandy-and-water, if the patient can possibly swallow it; but if the narcotism be severe, this will be impossible, and it is wisest to abstain from attempts which may result in fluid going the wrong way. In fact do everything to keep the body warm and the breathing unimpeded, and strive to rouse the unconscious faculties into action.

Supposing, however, that the narcotism be very excessive, and the breathing be slow, irregular, and low, then if medical aid be not forthcoming, it would be well to resort to artificial respiration; by no means a difficult matter to manage, if only any one present has a slight amount of knowledge on the subject. The following is Dr Sylvester's method, and is advantageous from its simplicity: 'Place the patient on the back, inclined a little upwards from the feet by raising and supporting the head on a cushion, placing support also under the shoulder-blades. Draw out the tongue and keep it forward, so as to leave the air-passages free. Remove all clothing from the neck, chest, and abdomen. Stand by the patient's head, take firm hold of the arms just above the elbows, and draw them gently and steadily upwards above the head, keeping them stretched upwards for two or three seconds. Then turn down the arms, and press them firmly and steadily against the sides of the chest for two or three seconds. Repeat these movements alternately, deliberately, and *perseveringly*, until a spontaneous effort at respiration is perceived; immediately upon which, proceed to try by every possible means to induce circulation and warmth.' However, should the case of narcotism be *not* a severe one, such extreme measures as artificial respiration will not be called for, and in all probability, after the use of those simpler remedies at first named, sickness will occur, and this may be taken as a sign that the worst of the evil is over.

And here let us once more emphatically state that in this and all other cases we assume that a medical man is sent for, and that our suggestions only refer to what is to be done *until* he appears upon the scene. Nothing is so annoying and so productive of harm as for a non-professional person to be constantly making this and that suggestion as to the treatment of a sufferer, when a medical man is giving his best thought and skill to the case; but on the other hand it is well for people—more especially women—to know what to do when thrown upon their own resources.

Cases of poisoning from over-doses of opiates are of course only one class of such-like accidents; and the accidental swallowing of irritant poisons, embrocations, &c. often occur, and call for the utmost promptitude of action and presence of mind on the part of those present.

In the less densely populated parts of the country, it is a positive necessity that people should be able to rely upon themselves in cases of emergency, for if a doctor is many miles distant, and it takes several hours to fetch him, one might almost as well be without him, where sharp practice is called for. To produce vomiting, one of the best emetics we happen to know of is an American one. It consists of a table-spoonful of common treacle (molasses it is called across the water) and as much powdered alum stirred into it as the sticky compound can be made to contain. Now alum is such a valuable drug in many ways that it ought to be kept in every household medicine-chest; and treacle is not usually hard to get. We have never seen this remedy tried in a case of poisoning, but we have seen its effect in croup; and anything more decided and impetuous in its action it would be difficult to imagine. Such a dose might freely be given in any case of poisoning; and after the emetic has acted freely, we would give some soothing mixture, such as thickened milk. There are various things which have the power to a certain extent of protecting the coats of the stomach from the action of irritant poisons; if the poison be an acid, the scrapings off a white-washed wall or chalk and milk are good. Milk almost stiffened with common brown sugar is one of them; sweet oil taken to nausea is another.

In all cases of poisoning, *loss of time* is the one great thing to be avoided; and the nearest remedy at hand is the best one to make use of. Mustard and water, strong and plenty of it, is a capital emetic. Of croup, that enemy of juvenile humanity, we must now speak a few words; and we know of no better remedy than the American one above described, combined with a hot bath and a hot blanket to roll the child well up in afterwards.

The ignorance of the poor as to the treatment and still more the prevention of the diseases of children is something appalling, and there can be no doubt that thousands of little lives are annually sacrificed to this Moloch.

'I can't tell what ails my child, ma'am,' said a labourer's wife to the writer of this, one bitter day last winter; 'he's carrying on so strange; crouching like a cock, and turning his self almost black in the face every nows and again.'

The infant in question was comfortably seated on a nice cold door-step, and breathing as if he had swallowed a baby's rattle by mistake. 'Your child has the croup,' I said, picking up the unfortunate little creature and carrying it to the fireside; 'and if you don't do something for him at once, he'll very likely die.'

However something was done for him, and he didn't die; but he had a kick for his life all the same, and very little more door-step would have finished him. Yet this poor woman was not an unloving mother; she was only ignorant, and in her ignorance, assisting her child into the grave she would have shed such bitter tears over.

From croup to diphtheria is a natural progression, and we would wish to say a few, a very few words on this terrible disease; not as to its treat-

ment by the amateur nurse, for it is of the greatest importance that such cases should have close medical care. It is then on the subject of the operation called *tracheotomy*—that is, the making an outward incision in the windpipe below the seat of the disease, and inserting a tube for the purpose of respiration, that we would speak—not to discuss it in its medical aspect, but simply to say a word or two to nervous mothers who would shrink from the idea of the surgeon's knife touching a sick child under any circumstances whatever. Surely there can be no more pitiful sight to look upon than a child dying of diphtheria—the eyes wild with fear, looking appealingly for help from one troubled face to another; the little hand thrust into the mouth in helpless, useless effort to dislodge the terrible leather-like substance that is clogging up the throat, and making each breath a sound so painful that for days and weeks to come it will not cease to sound in our ears. What more agonising sight can the sick-room give us to gaze upon? And yet doctors have told us of cases in which a mother has had such an overpowering dread of the surgeon's knife, that even when things come to such a state as this, she has positively refused to allow of any attempt at alleviation of her child's agony by a simple operation!

Now it is on this head we wish to say a few words of encouragement and counsel. Tracheotomy is in the first place a *chance*—a very slight chance in most cases—but still a chance for life; but if it does not save life, it spares the child a death of awful suffering. The pain of the operation itself is so momentary as not to be worth considering, and relief is *instantaneous*. We are not speaking of recovery, but simply of the difference between such a death as that described above and the quiet 'falling asleep' of the child upon whom tracheotomy has been performed; and this is what the writer saw—the frightened appealing eyes; the pitiful effort at self-help; and then the instant relief given by firm and skilful hands; and four-and-twenty hours later, the quiet painless death; the boy smiling up into our faces as the pure spirit fled to that place of rest and peace where 'there shall be no more pain.' It was not a thing to be seen and forgotten.

LIFE IN A MILITARY PRISON.

BY A PRISON CHAPLAIN.

IN an address lately delivered at Birmingham, Professor Tyndall says: 'I met some few years since in a railway carriage the governor of one of our largest prisons. He was evidently an observant and reflective man. He told me that the prisoners in his charge might be divided into three classes. The first class consisted of persons who ought never to have been in prison. External accident, and not internal taint, had brought them within the grasp of the law, and what had happened to them might happen to most of us. They were essentially men of sound moral stamina, though wearing the prison garb. Then came the largest class, formed of individuals possessing no strong bias moral or immoral, plastic to the touch of circumstances, which would mould them into either good or evil members of society. Thirdly came a class—happily not a large one—whom no kindness could conciliate and no discipline tame. They

were sent into this world labelled "Incorrigible," wickedness being stamped as it were upon their organisations.

As a matter of fact, there is a distinction made, and rightly made, between the inmates of military prisons. They are divided into first, second, and third classes; which you may call bad, worse, and worst, if you are of the despairing type of philanthropist; or good, better, and best, if you are a great believer in human nature, even in imprisoned human nature. The first class wear a red stripe on the arm, and being the best conducted, are given less work to do and more food. Class number two are marked with a yellow stripe; while the third or lowest class are distinguished by a white badge. A stranger might perhaps shrink from all who wear white stripes as from 'incorrigibles,' but some in the third class may be really very little more 'incorrigible' than himself, for every prisoner, no matter what his character may be, except in very special cases, is placed in the third class on his reception. He then, by good conduct, becomes eligible for promotion into the second class, and subsequently into the first. Rule one hundred and sixty-six of the Regulations for Military Prisons, lays down that 'the first class will be composed of those prisoners who, from their quiet orderly habits and general good conduct under punishment, may appear deserving of being promoted from the second class after some experience has been gained of their characters. Prisoners in either the first or the second class will also be liable to be removed to a lower class for misconduct.' Though the first class of prisoners are employed during the same hours as those prescribed for the second class, the labour is of a less severe description; picking oakum or drill being substituted for the deservedly hated crank and shot exercise. Another privilege enjoyed by the first class is, that they are never deprived of their bed, whereas, 'all prisoners on reception are to sleep for the first week in the same manner as a soldier on guard—that is, on a board without undressing—and subsequently, the third-class prisoners are to sleep as on guard every other night; and the second-class prisoners in the same manner every third night: the prisoners of the first class being alone exempted from this rule.' First and second class prisoners are employed in this prison—which is no Castle of Indolence—at drill, shot exercise, the crank, cleaning the passages and other parts of the premises from six o'clock A.M. to six o'clock P.M.; and those of the third class from six o'clock A.M. to eight o'clock P.M.; with the exception of regular times for parades, chapel, and meals.

'If any man will not work neither let him eat,' is a motto strictly adhered to by the authorities; for no prisoner is allowed meat-dinner who is not employed at hard labour. Those not so engaged are only given porridge and bread-and-milk. When labouring at hard work, prisoners have a meat-dinner every Tuesday and Thursday. Eight ounces of beef without bone and one pint of soup is the allowance. The first class have an additional meat-dinner on Sundays. There is, we see, considerable advantage to be gained by the prisoner, to reward his ambition, should it prompt him to move upward into a higher class. Now this is no trifling matter, for the very essence of good prison discipline is the subordination of mere

punishment to reformation; and this system of classification tends not only to preserve a man's self-respect, but to fan the spark of hope that otherwise might be extinguished in his breast.

The justly celebrated novel *Never too Late to Mend* has made the public in some degree familiar with the 'silent system' of prison discipline. This system has been found not to work when sentences are for a long period. Speech is discovered to be more than a luxury, being essential to the mental health of prisoners. None now are condemned to the silent system except those who are imprisoned for only a short time. And how great is the punishment of not being allowed to speak, is proved to the chaplain by this one fact. No where are prayers so diligently responded to and hymns sung with such *will*, if without musical taste, as in the chapel of a military prison, for prisoners recognise the service as an opportunity of convincing themselves that they have not become dumb. Until this explanation was given by the governor, I was full of admiration for religion, afterwards discovered to be more loud-sounding than genuine.

Prisoners condemned to solitary confinement are forced to turn to the wall on the approach of visitors or the superior officers of the prison. 'Has my face assumed any terrific aspect? Am I so much worse-looking than usual?' This is the thought that naturally comes into one's mind on walking through a military prison for the first time. Each man takes a quick glance at your Gorgon head, and then, fast as lightning, turns his back to you and his face to the wall, until your apparently baneful or bewitching influence has passed.

Another humiliation to which prisoners have to submit is that of having their hair frequently cut short. A man must sink very low indeed before he loses altogether personal vanity. It would seem as if there were a peacock as well as an angel and a beast in each of us. For this reason the regulation that requires the hair of all prisoners of the third class to be cropped every fortnight is no slight punishment. It is especially felt by those who leave the prison without having been promoted to the second and first classes, in which a prisoner's hair is permitted to grow during the last fortnight of imprisonment. How can a man shew himself in respectable society, or take off his hat to a lady, when that common act of courtesy would reveal the fact that his hair was cut by—government?

Some may desire to know whether flogging has or has not been entirely abolished. To the question, we answer: 'Yes; except for aggravated breaches of prison discipline.' Nor is it easy to see in what other way such cases can be dealt with. A man, let us suppose in a fit of sulky stubbornness, does not attempt to pick his oakum. He is brought before the governor, and sentenced to lose his supper and bed; that is, to be obliged to sleep on the floor. On going back to his cell he says to himself: 'What can I do now to avenge myself on the authorities?' and he acts on the impulse that seizes him, which is to break the window and destroy everything in his cell. Probably this sort of stubborn ill-conditioned character is a coward; and if this be the case, nothing is found to bring him to his senses so well as twenty-five lashes

administered in the presence of the governor and medical officer.

The punishments which we should like to see abolished, if others without equal or greater disadvantages could be discovered, are the crank and shot-drill. 'What is the crank?' may be asked by happy people who have never had to do with prisons in any way. It is, we answer, a Sisyphus' wheel that the prisoner is forced to turn twelve or fourteen thousand times each day, for no other reason than because the useless monotonous exercise is sufficiently hateful to him to be a real punishment. 'To what purpose is this waste?' we may ask. Why is this wheel not made to pump water or grind corn or do some other useful work? Why should a man be degraded into a machine, and made to turn a wheel merely for the sake of turning it? Will he not in this way lose all self-respect? Yes; these are the unanswerable arguments against the crank. But then its very uselessness is urged as an argument for its retention. Suppose, for instance, that prisoners are employed in gardens where vegetables are cultivated for barrack-use, what will be the consequence? That soldiers will desire to abandon their own profession for Adam's calling, and for this purpose will designedly get into prison. If, again, the crank-wheel be utilised in any way, men will feel that they are useful members of society, and will probably prefer their new work to the dull routine and irksome duties of barrack-life. Almost the same remarks are applicable to shot-drill, or the very humiliating process of lifting six times each minute for three hours per diem a thirty-six pound cannon-ball, for no other reason than to put it down again three paces from where it originally lay. Nothing can be more fatiguing and worrying than this process of putting the shot there and back, there and back, there and back! But then we must again remark, that to make prisons very comfortable is absolutely to make them useless.

Almost all the inmates of military prisons are sentenced for such crimes as these: Desertion—the commonest crime of all—making away with kit, breaking out of barracks, insubordination. How is desertion to be stopped? This is now a very difficult problem with the authorities, and almost all officers give it as their opinion that the plague of desertion can only be stayed by again having recourse to the system lately abolished of branding the letter D on the deserter's side. In the absence of this *Nota bene*, there is nothing to prevent a soldier from enlisting over and over again in different corps, in order to get a bounty and new kit on each occasion.

As regards insubordination, when you speak to a prisoner on the folly of having resisted or disobeyed a non-commissioned officer, he will generally give an answer somewhat as follows: 'Well, sir, when I came back from foreign service I had a little money, and with this I drank with some comrades more than was good for me. There is a corporal [or sergeant] in the barrack-room who is always down on me; and upon that day, having had a little too much, I could not stand his going on at me; and so I—though indeed I tried to help myself doing so—just struck him between his eyes.' There is no doubt that nine out of every ten soldiers in military prisons have got into trouble through drink. A soldier was once overheard

describing the advantages of the Cape as a station in these words: 'Drink is cheap, and you are always dry.' Men of this stamp fill our military prisons.

In some cases the crime of insubordination is provoked by the petty bullying and offensive manner of non-commissioned officers, though their superiors do their best to check them. Officers are now easily accessible, and are ready to give the youngest private an impartial hearing. In all respects the position of a British soldier is now greatly improved. Indeed it is not too much to say that life in a military prison now is quite as endurable as was existence out of it to the well-conducted soldier of forty years ago.

DESOLATE.

LIKE a funeral pall,
Darkness lies over all;
Weirdly the owl doth call
From her lone steep.
Sadly the night-wind blows
Over December snows;
Vain 'tis my eyes to close—
I cannot sleep,

Thy voice is in my ear;
Once more thy words I hear,
Bringing now hope now fear,
But always love;
And thy sweet face doth rise
Radiant with starry eyes,
Cloudless as summer skies
In heaven above.

Once more at night's soft noon,
Under the pensive moon
Of a long vanished June,
With thee I stray:
As when in days of old
All my heart's love I told,
And to my pleading bold
Thou shouldst not say.

When thou wast by my side,
Calmly the days did glide;
Like an untroubled tide
My life did flow.
Then was each hour too brief;
Now I but seek relief
From my consuming grief,
Rest from my woe.

Now falls the scalding tear,
Shed for the present dear;
Shed for the past so dear,
So quickly flown.
Over thy lonely grave,
Hard by the sounding wave,
Madly the wind-gusts rave;
I am alone.

Yes; but my whole life through
Lead have I been and true;
Lead shall I be to you,
As true as then;
Till when that life is o'er,
Skyward my soul shall soar,
And on the heavenly shore
We meet again.

H. D.

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CHRISTMAS-TIME.

'So many men so many minds' has been a proverb long before our days, and will be to the end of time and human history; and uniformity of sentiment is the one thing which men need never hope to attain.

Christmas-time is one of these battle-fields of feeling. To some it is just the consecration of so many circumstances of torture; to others the meeting-point of so many facts of pleasure. From the conventional greeting to the orthodox dinner—from the 'seasonable gifts' that are more obligatory than voluntary, to the toast that heralds the punch, and the dreams that follow on that last glass—all is so much pain to the flesh and weariness to the spirit; and they wonder how any one can find it otherwise. What is there in Christmas-time to make it pleasurable? they say. The gathering together of the family? A lot of rough boys home from school, who spoil the furniture and tease the dogs, lame the horses and ravage the garden, make the servants cross, the girls rude, and the younger children insubordinate; who upset all the order of the house, destroy its comfort like its quiet, and to whose safe return to discipline and your own restoration to tranquillity you look forward with impatient longing from the first hour of their arrival to the last of their stay? Or the advent of your married daughter with her two spoilt babies, who cry if they are looked at and want everything that they see, and that very objectionable young man her husband, with his ultra opinions and passion for argument, whom she would marry in spite of all that you could say, but to whom you can scarcely force yourself to be decently civil, not to speak of cordial, and whose presence is a perpetual blister while it lasts? Is this the family gathering about which you are expected to gush!—this with the addition of your son's fine-lady wife who snubs his mother and sisters with as little breeding as reserve, finds nothing at your table that she can eat, lives with her smelling-bottle to her nose and propped up with cushions on the sofa, and gives

you to understand that she considers herself humiliated by her association with your family, and your son as much exalted as she is degraded? This is the domestic aspect of Christmas-time which is to make you forget all the ordinary troubles of life, creating in their stead a Utopia where ill-feeling is as little known as enmity, and family jars are as impossible as personal discomfort and dissent. Holding this picture in your hand, you decline to subscribe your name to the toasts universally chanted in praise of Christmas, and wrap yourself up in sullen silence when your neighbour congratulates you on having all your family about you, and wishes you a merry Christmas as if he meant it.

If the domestic aspect is disagreeable, what is the social?—A round of dinners of which the *menu* is precisely the same from Alpha to Omega:—turbot and thick lobster-sauce; roast-beef and boiled turkey; indigestible plum-pudding and murderous mince-pies; with sour oranges and sweet sherry to keep the balance even, and by the creation of two acids perhaps neutralise each other and the third. This is the food set before unoffending citizens under the name and style of Christmas dinners for the month or six weeks during which the idiotic custom of Christmas dinners at all is supposed to last. You are expected to live in this monotony of dyspepsia and anti-pathetic diet till you loathe the very sight of the familiar food, and long for a change with a vehemence which makes you ashamed of yourself, and more than half afraid that you are developing into a gourmand of the worst kind.

As if your nights were not sufficiently broken by the horrible compounds which trouble your digestion and disturb your brain, torturers known as the 'waits' prowled through the streets from midnight to dawn, causing you agonies beyond those which even the hurdy-gurdy men inflict. You are just falling to sleep—painfully courted and hardly won—when a hideous discord worse than the wailings of cats startles you into a nervous wakefulness which banishes all hope for that night. What can you do? They are too far off for that jug of

water to take effect, and you must not fire; anathemas do not hurt them, and if said aloud only waken up your wife and make her cry if she does not preach. You have nothing for it then but to lie still and groan inwardly, devoting to the infernal gods all the idiotic circumstances by which your life is rendered wretched, and your health, already frail, set still further wrong. In the morning, when wearied and nervously feverish from want of sleep, you go into the garden for a little quiet and delectation, you find your greenhouses stripped of the flowers which you had been lovingly watching for weeks, and your evergreens as ridiculously cropped as a shaved poodle. This is the day for the decoration of the church, and you, having made an expensive hobby of your garden, have to contribute what has cost months and good money to rear, for the childish satisfaction of John and Joan, lasting just two hours and five minutes. Not only have you lost your flowers and your evergreens—that splendid holly, which yesterday glowed like a flame, to-day nothing but a bundle of chopped ends!—but you know that your favourite daughter is flirting with the curate, and that a great deal is going on under cover of wreaths and crosses, laurustinus and chrysanthemum, of which you strongly disapprove yet cannot check. It is Christmas-time; decorating the church has become in these later days a kind of religious duty; and as a conscript father of your village, you must not forbid your daughter this pious pleasure any more than you can refuse your costly contribution in kind.

Turn to the financial side of the time; and what have you?—bills coming in that you neither expected nor knew of, and every one looking for a Christmas-box, and insolent or irritated if they do not get it. The servants obsequious to the worth of half a sovereign—tradesmen and their lads punctual in anticipation of half-crowns—postmen levying blackmail, and watermen and dustmen demanding as their right that they should be fed for their persistent neglect of duty—every one making a dead set at your pocket and trying to get your money for themselves—the very children more caressing and affectionate because it is Christmas and papa always gives them something on Christmas-day:—You groan as you ask yourself where is disinterestedness on this earth?—and you groan still more as you draw your cheques and reduce your balance and wonder by what law of right it is that you should be the pipe by which other folks are to be supplied.

No; you see no good or pleasure in this boasted Christmas-time as we keep it up in our benighted country. Its mirth is a sham and its inflictions are only too real. A time of tumult and expense, of indigestion and discomfort, you wait, grimly or fretfully as your mood may be, till it has passed and the current of your life is allowed to flow evenly as before. When you hear people sing its praises you long to stop their mouths, as you longed to silence the waits who woke you up out of your first sleep and spoil your rest for the night. What manner of men are these, you think, who can find cause of congratulation in so much absurdity, if the fun is real to them—so much dreary make-believe, if it is unreal? You despise your genial, laughing, merry-hearted neighbour who gets into everything *con amore*, and accepts it all, from forfeits and snapdragon to plum-pudding

and Christmas-boxes, as if he really liked it. You think what a fool he must be to be pleased with a rattle, tickled with a straw like this. But for the most part you do not believe in his mirth; and then you despise him still more as a hypocrite as well. For a hypocrite shamming folly is an offender against reason as well as truth, whom you find it hard to forgive, let the motive of his mummery be what it may.

This is one side of the question; your neighbour takes the other.

Who on earth, he says with his hands in his pockets, his back to the fire and his kindly smiling face to the room, who on earth can grumble at the facts of Christmas-time? For his part he finds it the jolliest season of the year, and he finds each season as jolly as the other, and all perfect in their own appointed way. He is none of your crying philosophers who go through life bewailing its miseries and oppressed by its misfortunes. Not he! He thinks the earth beautiful, men and women pleasant, and God very good; and of all occasions wherein he can transact his cheerful philosophy, Christmas is the best. The boys are home for their holidays; and it is a pleasure to him to take them out hunting and shooting, and initiate them into the personal circumstances belonging to English country gentlemen. He looks forward to the time when they will take his place and carry on the traditions of the family, and he wishes them to be worthy of their name and an honour to their country. He is not one of those nervous self-centred men who live by rule and measure and cannot have a line of the day's ordering disturbed. He likes his own way certainly; and he has it; but he can press his elbows to his sides on occasions, and give room for others to expand. He does not find it such an unbearable infliction that his boys should come home and racket about the place, even though they are a little upsetting, and do not leave everything quite as smooth and straight as they found it. He remembers his own youth and how happy it made him to come home and racket; and he supposes that his lads are very much the same as he was at their age. He thinks too that they do the girls good—wake them up a little—and while not making them rough or rude—the mother takes care of that—yet that they prevent them from becoming prim and missy, as girls are apt to be who have no brothers and are left too much to themselves. Certainly he does not approve of the flood of slang which is let loose in the house during their stay; but school-boy slang at the worst is not permanent, and in a week's time will be forgotten.

As for the married daughter's children, they are the merriest little rogues in the world; and his wife looks ten years younger since they came. She was always fond of babies; and her grandchildren seem to renew her own past nursery with all the pleasure and none of the anxiety of the olden time. He rather wonders at his girl's taste in the matter of her husband—most fathers do—and cannot for the life of him see what there is to love in him. But if not an Alcibiades he is a good fellow in the main, and makes his young wife happy; which is the principal thing. And if his daughter-in-law is a trifle stiff, and fond of giving herself fine-lady airs, he for his part never stands that kind of nonsense, and will laugh her out of it before she

has been twenty-four hours in the house. He finds good-humour and taking no offence the best weapons in the world against folly and ill-temper; and prefers them as curative agents to any other. The girl is a nice girl enough, but she has been badly brought up—had a lot of false ideas instilled into her by a foolish mother—but when she has been away from the old influences, and associated with themselves for a little while, she will open her eyes and see things in their right light. Who indeed could resist the sweet sensible influence of his wife, her mother-in-law?—and are not his girls the very perfection of honest wholesome English ladies? It will all come right in time; he has no doubt of that; and meanwhile they must be patient and forbearing for Dick's sake, and not make matters worse than they are by their own want of self-control.

Then as to the Christmas-boxes and the tips sacred to the season—well! well! after all they do not amount to much in the year, and see what pleasure they give! A man must be but a poor-spirited surly kind of bound who does not like to see his fellow-creatures happy; and a very little kindness goes a great way in that direction. He takes care to live within his income, and therefore he has always a margin to go on; and he does not object to use it. The servants have been very good on the whole, and do their duty fairly enough. And when they fail—as they do at times—why, to fail is human, and are they alone of all mankind to be blameless and never swerving in the right way? And are they alone of all mankind to be judged of by their worst and not by their best?—to be blamed for failure, but not praised for well-doing? He does not think so; and not thinking this, his half-sovereigns are given freely without the grudging which makes them an ungracious tax instead of a kindly voluntary gift. The tradespeople, too, do fairly well, and—they must have their profit like any one else! Those Christmas-boxes to their lads may be the nest-eggs for future savings; and even if they do go in a little finery or personal pleasure instead—youthful people will be young, and his own boys are fond of being smart and amused; so why not these others? You grumble at the waits? If you in your warm bed, well fed, well clothed, prosperous altogether, fret at the loss of an hour's sleep, what must these poor fellows feel, out in the cold frosty night, with the wind blowing and the sleet falling fast, and they not half fed nor a quarter clothed? For his own part he would like to give them a glass of hot grog all round; and as for grumbling at the few coppers which they brave all this physical discomfort to earn, he makes it shillings, and hopes it will do them good. We must live and let live, he says with his broad smile; and if we are sometimes a little inconvenienced by the efforts made by the poor to accomplish the art of living for their own parts—we must remember that our loss is their gain, and that they are men and women like ourselves—fathers of families who want to keep the pot boiling and the fire alight—mothers who love their children, and are anxious to do the best for them that nature and man will allow.

You complain of indigestion and grumble at the monotony of your Christmas fare?—That is strange! Who can grumble at good plain succulent meat?—and why do you eat the sweets if they

disagree with you? Neither pudding nor mince-pie comes into the eternal necessities of things, and you would do very well if only you would refrain. He does not eat things that he cannot digest, and in consequence he sleeps well, and when he wakes has neither regret nor remorse. Surely that is not such a painful trial—to forbear eating what is hurtful to your health, and in touching your health corroding your happiness as well.

In a word, the whole difference of the spirit in which we meet the facts of Christmas depends on the good or ill humour with which we are naturally endowed, and which we have cultivated by common-sense on the one hand, or suffered to ride rough-shod over our reason on the other. If we are unselfish and sympathetic, Christmas-time is as pleasant to us as popular tradition would make it; if we are egotistical and peevish, it is a wearisome infliction and a sham which no honest man can pretend to believe in, nor any sensible one to admire.

For our own part we believe in Christmas, because we believe in the kindness of man to man, in genial good-humour, in unselfishness, and the liking of wholesome natures to give happiness; and so far as we have gone yet we have seen no reason to change our views. A merry Christmas then to you all, friends, readers, and countrymen; and a happy New Year to follow after; and may God bless the rich and care for the poor, and lead us all in the right way while the day lasts and before the night has come!

A CAST OF THE NET.

THE STORY OF A DETECTIVE OFFICER.

CHAPTER IV.

LONG after it had grown quite dark, all remained quiet, and at last I resolved upon making a move. I had determined upon fetching Peter Tilley. I had plenty of assistance, but I thought I should like to have Peter with me. So I went down to the ferry; a gas-light which burned at the corner shewed me before I left my post that the bony ferryman was not there; and choosing a pretty good boat with a strong young fellow to pull, I got in. It was a most unpleasant night; as dark as pitch, which was bad enough, but every now and then it lightened, which was worse, as it dazzled my eyes, and made me think we were running smash on board some great vessel which I had not seen a moment before, and couldn't see a moment after. However, the boatman was used to all kinds of weather, I suppose, and knew the river thoroughly; so through the darkness and the rain, which never left off for a moment, we reached the other side.

I left the boat to wait for me, and ran up to the *Yarmouth Smack*. I looked in, and saw Peter leaning against the bar and smoking a short pipe, as a labourer ought to do; and he was talking in a friendly way to some rough-looking fellows. I slipped in, and using the name we had agreed upon, spoke to him. He knew my voice of course; but seeing me so changed, for my make-up was really splendid (it was, although I say so that shouldn't), it gave him such a shock that he was

obliged to put the pewter down he was going to drink from and look steadily at me before he answered. 'I'm acoming,' he said at last, and we got outside; when, as we walked down to the ferry, I gave him a sort of idea of what was going on, and how I expected to make a great catch that night. Peter of course was very glad to be in for such a big thing as this, for he had never been mixed up with anything so important.

Not to trust the boatman too much, I kept Peter back a few yards from the water while I finished my story, standing a little on one side, so as to be out of the way of the people who came and went to and from the ferry. While I was talking to him, a wherry ran in; we heard her grate on the pebbles and the sculls rattle as the man laid 'em in; but that we had heard before. It's a part of my habit to notice little things however, and I looked to see who had come in by this boat. There was only one passenger, a woman, and she passed us walking quickly; but quick as she walked, I saw her, and she saw me. Blessed if it wasn't Miss Doyle! My being there was no odds to Miss Doyle, nor could it have signified to her if she had seen me fifty times; yet I felt I would rather not have met her just then; it looked unlucky, and she was such an uncommonly sharp one too. Sharp or not, I couldn't see what she could make out of my standing under a wall on a wet night talking to another labourer.

Having finished my explanation, we both got into the wherry, and I asked the man if he would like a good long job, which might perhaps last all night.

'The longer the better, governor,' he says, 'if the pay is accordin'.'

'The pay *will* be accordin', I answered; 'and so you are engaged.'

The first thing I made him do was to row round that oyster-smack, for the tide had risen enough to take us round her. I shewed no light, but we went inside her twice; and the fellow on the watch was very sharp, so he was leaning over the side when we came round the second time, and I could say quite quiet-like: 'I am in this boat now—watch the river.' That was quite enough; he knew he would not now have to look to the *Anchor* for signals.

After this began what I believe was the most disagreeable sort of patrol I ever had. There was a time when I used to envy the Thames police; but I can't say I ever did after that night. We were obliged to be in motion almost continually, because we did not know from which side of the river the paper might come, and we weren't quite sure that it would come at all, especially on that night; and I don't know, speaking from my own experience, that there is anything more trying to the spirits than the pulling backwards and forwards and loitering about on the river Thames in a raw October night with a small thick rain falling. Twice we landed, and went once to the *Smack* and once to the *Anchor*. I couldn't grudge the men a glass of hot grog; in fact I was obliged to have some myself, even if I missed my capture through it.

It grew later and later; the flashes of lightning still came at long intervals; but the lights on the shore went out, and excepting the gas-lamps which burnt at street-corners, ferries, and wharfs, all was dark. The traffic on the river had long

ceased, no shouts or rattle of wheels came from the shore; and the rain still falling, it was, I give you my word, most horribly miserable, dull and sloppy beyond description. Twelve o'clock had struck, and one, and perhaps half an hour beyond it. I had cautioned my companions to speak very low; so the boatman only whispered when he said: 'It's as quiet as it is likely to be, governor, if you've got anything to run. I have just seen the police galley creep along on the other side; I see her under that lamp. Now's your time.'

He thought we were smugglers! Perhaps he didn't care if we were thieves. I told him to be patient; when at that very instant, just as we were creeping along under the lee of a coal-barge, a wherry shot very silently by, right in front of us, going across stream, and not six feet from our bows. In her sat the sulky ferryman; I knew him at a glance, dark as it was. 'Pull after that wherry,' I said.

'Peter Tilley, my lad,' I continued, turning to Peter, 'the time's acoming, I think.'

'I'm precious glad of it,' says Peter; 'for I'm catching a cold in my head every minute I sit in this confounded boat; and it's all soaking wet where I'm sitting.'

Our man pulled on; he was a very strong fellow, as I have said, and we could have overtaken the other boat directly; but this of course I did not want. I knew where to look for the old scamp; and sure enough, after a few strokes across stream, he bent to the left and ran under the bows of the Dutch trader.

All was dark and silent as the grave aboard the ship; but that didn't deceive the old boatman, nor did it deceive me. I stopped our man in the shade of the next vessel, if you can call anywhere a shade, when it was all pitch dark. We had not been there a minute before I heard a slight noise—it was impossible to see any one unless he stood between you and the sky—and then I could tell by the sound that a man had dropped into the wherry. There was no need to tell me what man it was. With an almost noiseless dip, the ferryman dropped his sculls into the river again and rowed on, we still after him. I took it for granted he was going to the other side of the ferry; but he suddenly bore off to the right, and rowed on for some little time, then striking in between two vessels, he went straight for the land.

'Where is he going to?' I whispered.

'To the landing at Byrle's wharf,' says the boatman in the same tone.

So he was; and it appeared this landing-place was at the farther side of the wharf; that is, lower down the river.

It was so dark we could hardly see them—for we could just make out there were now two persons in the boat—but as they reached the shore, a lamp that was burning on the wharf helped us a little. We could not clearly see what they were doing; but they certainly got out of the boat, and as certainly there were then more than two figures moving about, and seemingly engaged in placing parcels in the wherry. But it was very gloomy there; they were in the shade of the wharf, and the lamp glimmered weak and faint through the thick rain. It was the more difficult to see what was being done, because there were several boats tied up to the landing-place, making some confusion in the darkness. At last, however, we could see that

they were pushing off from the shore; so it was time for us to move. We pulled back for a while (there was no doubt as to which way the others would come), and then sheering off, lay between two colliers, until we saw the wherry we had watched go by, and then we once more pulled after them.

'I'm blest if I don't think there's another boat following us,' says Peter Tilley, staring as hard as he could behind us. I looked, but couldn't see anything; and Peter owned he might have been mistaken.

We could not make out how many there were in the foremost boat. There was only one man rowing, that was plain; and he pulled short round at the proper place, as I knew he would, and rowed towards the Dutch trader. As he did so, we lost him for a second, a big steamer lying between us; but the hull of this vessel did not obstruct the view up the river. I seized the moment, and waved my lantern twice. It was all right. As quick as thought the light on board the oyster-smack was moved twice also, and then we too were pulling across the stream. I wanted to capture my men on board the trader, as otherwise the paper might be got rid of, because I couldn't be positively certain that it was not already on board. In fact, Mr Edmund Byrle was my chief aim, not the skipper.

The wherry pulled under the bows of the vessel; we followed just in time to see, by a very convenient flash of lightning, two packages handed up; then a figure, which we had recognised by the same flash as the boy ferryman, got into the ship. As he disappeared, our wherry touched the vessel; and at the same instant, to my great relief, a long black Thames police galley came alongside us, and its crew, five constables, with Barney Wilkins, who was there as guide, clambered up like cats. I and Peter initiated them, but not quite so quickly; and when I looked over the bulwark, I saw by the light of a couple of lanterns, screened from the outside, four or five men, the boatman and the skipper being two, lifting up a great lid which fitted in the deck—the hatches I heard it called—while by their side lay the packages of paper. I could not see Mr Byrle; but there was no time to consider; we all jumped in at once, the men looking round in amazement at the noise. I fancied that just then I heard a shout from the boat.

'What do you all want here?' said the skipper angrily.

'We hold a warrant!—I began.

'Oh, it is *you*, is it?' he screeched, like a hyena, or something of that sort. 'I owe you a little for a past score, and you shall have it.' As quick as lightning he pulled a long straight knife from the side of his trousers, where it must have been in some sort of sheath, and jumped at me with such suddenness that he would have stabbed me, only Barney Wilkins snatched a handspike from the deck, and dashing between us, hit him down with such a blow, that the skipper fell with a crash like a bullcock when it is killed, the blood pouring from his head instantly.

It was all as quick as thought. The other men were all seized in a breath. So quick was it all done, that I had no idea Barney was hurt, until he reeled, made a wild clutch as if he caught at something for support, and then pitched forward on his hands and knees.

'Hollo, Barney!' I said, stooping down to him. 'What's the matter, old fellow?'

'It's all up, Mr Nickham,' he gasped; 'he's done me. I only hope I've killed him. Where's the other?'

'Oh, never mind the other, Barney,' I says. 'Where are you hurt?'

But as I spoke, one of the men came with a lantern, and Barney had no occasion to answer me, for I could see a straight stream of blood running from his chest on to the deck; and his hands giving way from weakness, he fell over on his side.

'Pull in for the shore, you, sir!' said the sergeant of the Thames police to my waterman. 'You know Marigold Street? Knock up Mr Gartley, and tell him what has happened. Say we are afraid to move the man to his house, so he had better come aboard.'

'Send one of your own men, will you?' answers the boatman. 'I've got something to tell the governor' (that was me), 'as I think he ought to know.'

'Cut away then, Bill,' says the sergeant to a constable; 'these fellows are ironed, and we can manage all that are aboard this craft.'

So the man went off in my wherry; and the Thames men tried to make poor Barney a little more comfortable, while I undid his waistcoat, hoping to stop the bleeding.

'It ain't no use,' he said; but in that short time his voice was almost gone, and we could tell that he was dying. 'I'm done for, Mr Nickham. If there's a reward, you'll act fair and square, I know; you always was a gentleman—let my sister have'— And with that he gave a gasp, and was dead.

I rose up, dreadfully vexed for the poor chap. The sergeant and one of his men were looking after the skipper, when I felt myself touched on the arm.

'I say, sir,' said the boatman, 'when I'm in for a thing, I go through with the honourable. Did you know as you was followed?'

'Followed? no!' I said.

'I thought we was!' said Peter Tilley.

'We was followed, sir, by a light wherry with two people in it,' continues the boatman; 'and when they see our boats, they held hard; and as you all boarded the ship and the noise began, they rowed away as hard as they could go.'

'(Which way did they go?) I said.

'Down river,' says the man. 'But it's of no use thinking of looking after them now. They are ashore long afore this.'

This was likely enough; and it was quite certain that Mr Edmund Byrle was one of the two in the boat, and I had lost him for the present. Well, it couldn't be helped; so we set to work to question the men and search the ship, till the doctor came. The men knew nothing more about the business than that they were going to have two passengers, a lady and a gentleman, this voyage. One of the Thames men understood Dutch, or we should not have heard even this scrap of information. The sulky boatman never uttered a word, except that once he said as I passed him, and he said it with a bitter curse: 'I always had my doubts of you.'

The doctor came off; but poor Barney was stone-dead, while the skipper's skull was badly fractured. However, the paper was all there; so I supposed,

and so it proved; and I shouldn't have cared if the skipper's head had been broken fifty times over.

We got our prisoners to the shore, leaving the craft in charge of a Thames police galley that came in answer to our signals; and late as it was, I drove with Peter Tilley in a cab to the City. Our people there were immensely glad, I can tell you; and when I went over to the Bank (for there was no need for secrecy or dodging now), I thought the gentlemen never would have left off paying me compliments. Poor Barney Wilkins that was dead deserved most credit; but it could not do him any good to say so now, so I let them go on. The paper was examined, and found to be exactly the quantity required; enough, I believe, to have made about twenty thousand bank-notes. Ah! if they had got into circulation!

I hope you will understand, however, that I did act fair and square; and when the reward was paid (and the Bank people did come down most liberal; I bought my house at Pentonville with my share), I told the gentlemen about poor Barney and his wishes; and I'm proud to say they found his sister out and took her away; and after a time she went abroad with kind people who looked after her, and took care of her money till she got married, and did well. Why, she sent me a snuff-box made out of pure Australian gold, with a letter signed by herself and her husband, who was a butcher in a great way of business out there; and they sent it as an acknowledgment of my having acted all fair and square. I promised so to do, and I did.

Edmund Byrle was never caught, and so far as we were concerned, was never heard of; and if it hadn't been for his father, I should never have understood a lot of things that puzzled me. I had given a pretty good guess as to how Miss Doyle came in the first place to inquire about Mr Byrle and the detective; a very clever idea in itself, but like many other clever things, it lost her the game. Mr Byrle had talked with his friends about employing detectives; and Miss Doyle knowing about the Bank paper, and being always on the watch, had got hold of just enough to mislead her. She went out with Edmund Byrle to Turkey, I think, and was married to him; and old Mr Byrle sent out a friend to see them; and it was in this way I got the particulars. It appears she knew me again—only as the limping labourer, of course—when she saw me talking at the ferry to Tilley. But she knew him as the detective at the *Yarmouth Smack*, and she thought that although it might be all right, yet a detective was a dangerous customer, and his acquaintances might be dangerous also. Consequently she tried to persuade Edmund to put off his journey; but he wanted the money for the paper, and wouldn't listen to her. But he agreed at last to go aboard in another boat, which satisfied her, as she felt so certain the skipper's boat would be attacked. As I have explained, her precaution saved him from fifteen years' penal; which is the least he would have had. The skipper was sent for life, having killed a man in his arrest; but he didn't live six months in prison; he never got over the tremendous blow he received from Barney. All the reports spoke of his being a receiver of 'stolen goods.' The Bank paper was never mentioned, for the authorities did not want to unsettle the public again, or let them see what a narrow escape they had had.

And now comes about the queerest part of my story. Call me names if I didn't stop the thieving at Byrle's factory as well as recover the Bank paper, killing two birds with one stone.

It was all through my catching the bony ferryman. Finding that things was going hard with him, and hoping to make them easier, and being disappointed that those who were concerned with him did not come forward with money to provide for his defence, he 'rounded' on them; he split on them all, and owned how he was the means of taking the metal over to a fence on his side of the water, the things being stolen by a mechanic and watchman who were in league. (I see I have used the word 'fence'; this means a receiver of stolen goods; but though I have been warned by the editor of this magazine, we can't do without some slang words.)

Peter Tilley got a tidy present, and was noted for promotion through this business. I was glad of it, for Peter was a capital chap—never wanted to play first-fiddle; and I admire people of that disposition. I tell you what I did: I got the newest five-pound note of all what the Bank gave me, and they were all very clean and crisp, and I wrapped old Bob the gatekeeper's own sixpence in it; and I went to the factory and I stood a pint of ale, and says: 'Bob, here's your sixpence!' He hadn't known exactly who I was till then, for I had made excuses as usual; and then I'm blessed if he didn't quite cry over his luck. Mr Byrle too thought a lot of Bob's kindness, for I told the old gent about it; and I heard that on that very account he put six shillings a week on Bob's wages, and I was glad to hear it.

They couldn't keep me off the detective staff after this; and although I am free to confess—now I am on my pension and nothing matters to me—that I only stumbled upon these discoveries by accident, I was praised to the skies by those for whom I worked. However, it all died away, as such things do; but I had managed to get my house at Pentonville, as I have hinted; and a pleasanter neighbourhood I don't know, or one more convenient for getting about. I have had some rather odd adventures since I have lived in my street; you can't help seeing strange things, if you keep your eyes open in London. But I didn't begin to tell about *them*. I have finished my account of the robberies at Byrle & Co.'s and my story finishes in consequence.

FEATS OF ENDURANCE.

LONDON, which has witnessed many strange doings in its day, was lately the scene of the most wonderful feats of pedestrianism ever accomplished within a given period.

Every hour, day and night, for six weary weeks a man plodded on his way round a measured track, until the grand total of fifteen hundred miles in one thousand hours had been made up, finishing his self-imposed task with his physical and mental faculties apparently unimpaired.

The task of walking fifteen hundred miles in a thousand hours had never before been attempted, and henceforth the new achievement will throw into the cold shade of obscurity even the marvellous act of walking a thousand miles in as many

hours, which was once accomplished in 1809 by Captain Robert Barclay of Ury, a Scotchman, who proposed to perform the then incredible task of walking a thousand miles in a thousand consecutive hours. The proposition was received with every sign of incredulity, though, when the affair was finally arranged to take place, many thousands of pounds were staked on the event. Newmarket Heath was selected as the scene of the exploit, and the famous walk began on the 1st of June 1809, at midnight. It is unnecessary to repeat the details of this feat; it will suffice to mention that the enterprising captain completed his task on the 12th July, at four o'clock in the afternoon.

Since then, an attempt has, we believe, been made to walk the same distance *backwards*; and within the past twelve months, Weston, the American pedestrian, has performed some remarkable exploits of the kind; but has however at last beaten by an Irishman named Kelly.

The hero of the lately completed task (fifteen hundred miles in a thousand hours) is a little Welshman of not more than five feet three and a half inches in height, and about forty-two years of age; while in personal appearance and general *physique* he presents anything but what is usually supposed to be the characteristic of a good pedestrian. His name is William Gale, and he is a bookbinder by trade, living at Clerkenwell.

At the commencement of his task on Sunday the 26th of August, he weighed no more than eight stone four pounds (8 st. 4 lbs.); and from that day until Saturday the 6th October, during a portion of every hour day and night, he pursued his monotonous way around the inclosure at Lillie Bridge grounds, Brompton. When the attempt was first announced, even those most acquainted with pedestrian feats where great endurance was required, expressed themselves dubious as to the result; and in order to have a reliable record of his proceedings, Gale requested the different sporting papers to appoint competent men as judges—a request which was at once generously complied with.

Thus we have an official report of his great exploit, and the public are enabled to judge for themselves on the nature of the feat performed. Gale's average pace appears to have been about four miles an hour; but when he had reached his thousandth mile he assumed a brave spurt, and footed it in ten minutes, or at the rate of six miles an hour. During the last few days of his walking he started rather stiffly at first, owing to the pain caused by the swelling of some varicose veins in his left leg; but undaunted by so great and manifest a disadvantage, and other disadvantages which we shall presently refer to, the gallant little Welshman 'plodded his weary way' with a determined pluck that won the admiration and applause of every one present.

On Friday the 5th October, the day before the finish of the tramp, Dr Gant of the Royal Free

Hospital was called in to see this extraordinary walker, and after examining his legs, he pronounced Gale to be in excellent condition so far as his physical powers were concerned; there being no fever, the pulse only seventy, no murmur at the heart; and the varicose veins which had been the cause of so much pain to him, were rather better than worse, having considerably decreased in size. Perhaps the most remarkable part of the performance is, that it has been accomplished on a system of training which entirely sets at variance all athletic rules, for Gale partook of no fixed refreshment, neither did he have his meals at stated hours. His chief food was plain mutton-chops; and as an instance of how he varied his dishes, his afternoon meal on Friday the 5th October, which might have been either breakfast, dinner, or supper (so irregular had he been in this respect), consisted of a lobster and bread and butter, followed by a fried sole, and one or two cups of ordinarily strong tea. During the walk he also drank a good deal of beer—not strong beer, but the ale which is usually sold at fourpence per quart, which he seemed to prefer to any other kind, probably on account of its freedom from that tendency to increase rather than assuage thirst, so remarkably apparent in the stronger beer.

Many strange incidents occurred in the course of the six weeks, which were calculated to while away the time, and occasionally to bring a smile to the pedestrian's lips. For instance, a certain illustrated sheet, notorious for its very sensational cartoons, published a picture of Gale on the track followed by Old Time with the conventional scythe on his shoulder; and many people it would seem actually paid their money with the idea that they were going to see the two figures as thus represented. One man, who had evidently gone to the grounds for this purpose, had watched Gale go round the track several times, when he could no longer control his disappointment. He shouted aloud, angrily demanding his money back, because, as he said with the greatest naïveté possible, 'the beggar with the scythe hadn't turned up!'

As the last week of the great walking match wore on, signs of weariness in the indomitable pedestrian became painfully apparent, and many persons began to fear that the task he had set himself would after all remain unaccomplished. On several of the rounds he fell asleep whilst walking, and dropped to the ground; but this contact with mother earth seemed to revive him instantly, and he plodded on as pluckily as before. At length success crowned his efforts; and at seventeen minutes past five o'clock (less a second) on Saturday afternoon the 6th October 1877, Gale terminated his long and dreary walk in the presence of a large, fashionable, and enthusiastic assemblage, who rewarded his efforts with several rounds of hearty applause.

From the commencement of his task to the finish Gale bore up against all obstacles with extraordinary pluck and determination, his last mile being performed in *ten minutes and eight seconds*. He was at once removed to the tent or pavilion under which he had snatched so many brief half-hours' rest, and was examined by three medical men, who found that his heart was quite natural in its movements, and that the temperature of his body did not exceed one hundred and six degrees.

The great feat which has thus been accomplished without the aid of artificial training, is a marvellous instance of what human endurance, allied with courage and determination, can effect; though of what particular benefit it may be to the world at large it is utterly impossible to imagine.

Since the preceding account was written, Gale has accomplished a still more extraordinary feat, and one which for strength of will and physical endurance far surpasses his previous efforts. We still fail, however, to see the benefit which can accrue from exhibitions of this kind, and well might he have been contented with the laurels he had already won. He had scarcely allowed himself time to recover from his former task, when he once more appeared at a public place of entertainment, namely the Agricultural Hall at Islington, to walk four thousand quarter-miles under the astounding condition, that it was to be done in four thousand consecutive periods of ten minutes.

This of course deprived him of the half-hour's rest which he could obtain at one time in the former race, and only allowed him a few minutes between each round to get a little sleep. Despite these drawbacks, however, Gale finished his task at eleven o'clock P.M. on the 17th November, after a dreary walk of nearly four weeks. By accomplishing his task, he has placed himself at the head of all the famous pedestrians the world has known; and we trust that this fact will be sufficient to satisfy his craving after what is at best but ephemeral fame.

Men have on many occasions attempted walking feats which required a vast amount of physical endurance, and have failed from their utter inability to go without the natural quantum of sleep; but Gale has not only shewn himself to be possessed of the former, but to be altogether independent of the latter. This, however, instead of indicating 'pluck' merely, would rather seem to point to a peculiarity in the man's constitution; as there are doubtless many persons whose courage would enable them to perform the same or even a greater task if, like Gale, they could walk about in a state of somnolency or semi-sleep—a state in which, to use his own words, he was as one in a dream, unconscious of all that was going on around him, and believing himself to be walking in forests and other places of silvan beauty; and the truth of this was made evident by the fact that he would have often exceeded the limit of his walk had not the voice of his attendant aroused him from his stupor.

The average time occupied by this extraordinary walker was by day about three minutes for each quarter of a mile, and by night about five minutes; and the fastest round recorded was done in two minutes and forty-two seconds. His pulse was always found to indicate a perfect state of health, and was as regular when he left off as when he commenced his task. His food consisted principally of fish, fowl, chops, eggs, and light puddings; and his drink was, with only one exception during the whole time, tea.

Perhaps the most remarkable thing about the whole affair was the fact that, although he sank into a deep sleep directly he reached his chair behind the curtain, which hid him from view between his walks, the moment the bell rang

the second time, he would appear as fresh as ever and begin trudging away again.

When the feat was accomplished, Sir John Astley stepped forward, and amid a scene of great enthusiasm, presented the undaunted Welshman with a silver belt of the value of a hundred guineas, bearing the following inscription: 'This belt was presented to WILLIAM GALE of Cardiff, on the 17th November 1877, by some of the nobility and gentry of Great Britain, in commemoration of his hitherto unprecedented feat, namely walking one thousand five hundred miles in one thousand hours at Lillie Bridge Grounds, August 26th to October 6th, 1877, and four thousand quarter-miles in four thousand consecutive periods of ten minutes, at the Agricultural Hall, London, October 21st to November 17th, 1877.' The belt is of lion's skin, mounted on velvet, the metal portion of it weighing one hundred ounces of sterling silver.

None will begrudge Gale his well-earned reward; but it is to be hoped that such exhibitions will in future be discountenanced by the general public, as they not only detract from the dignity of man, but are needless and unwarrantable in a country which, we trust, will ever pride itself on a nobler civilisation than that which is founded upon mere physical endurance.

A DIFFICULT QUESTION.

THE STORY OF TWO CHRISTMAS EVES.

IN TWO CHAPTERS.—PROLOGUE.

In the gray light of an Indian dawn, with the cool breeze blowing through the curtains of the tent, and his friend's sorrowful eyes looking down on him, a soldier lay on his rough couch—waiting for death. They were soon to be parted those two, who had lived and fought together; but the face of the one who was starting on that journey of which none has measured the distance, was smilingly calm, while the eyes of the other glistened with regretful tears as he spoke low, faltering, remorseful words.

'Hush, Ralph, hush!' the other said at last. 'Don't you think, dear old fellow, I would sooner lose my life in having saved yours, than in any other way? After all, a few days or years sooner or later, what does it signify? My fate is perhaps the happiest, though I hope it is not. I don't think life is so very desirable,' he continued; 'I am only twenty-six; but mine has not been a happy one. It was my own fault, though. Take my advice, Ralph; don't marry young. There is only one thing that troubles me'—

'Your little girl,' Ralph interrupted. 'Wrayworth, let me take care of her; if I can make her happy, it will be some slight atonement, some'—

'You would take care of her, Ralph? would you?' The dying man's eyes shone gratefully as he looked up in his friend's face. 'She has nothing, poor little thing, he went on sully—motherless, fatherless, scarcely more than a baby either. It would be a heavy charge to leave you, Ralph.'

'Wrayworth! how can you speak so; you will drive me mad! You—you'—He broke down

utterly; it was something so terrible to see this friend dying there—for him. 'Anything on earth that I can do'—he murmured.

'You will do for her,' said Wrayworth. 'Thank you. I have no friends to send her to. I meant to have made her very happy.'

'She shall be; I swear it!' Ralph answered fervently, thankful for this charge, which might in some degree help him to pay that debt of gratitude, and forgetful that he had no control of fate, that the promise he gave of happiness was a fearfully presumptuous one. But he made it willingly, gladly, solemnly, before God; and as far as lay in his power it should sacredly be kept; any sacrifice he would make for this child.

His friend's eyes rested on him searchingly for a moment. 'I trust you,' he said—'I trust you.'

The hours passed on, the blazing sun arose, and Ralph went out into the burning glare with bent head and staggering footsteps, while words he had heard long since seemed floating round him in letters of fire: 'Greater love hath no man than this, that a man lay down his life for his friend.'—'Is there none greater?' he thought. 'Is there nothing I can do to repay—nothing?'

CHAPTER I.—ASKED.

The years were well on in their teens since that melancholy scene was enacted in the Indian tent—since Wrayworth consigned his only child to the guardianship of the friend whose life, at the expense of his own, he had saved on the battle-field. A carriage rolled along the snowy high-road through the cold clear air; the short winter's day was drawing to its close, and up in the darkening sky the stars were beginning to shine upon the world's most joyful season, upon Christmas eve. The world's most joyful season? We call it so, this festival, more than eighteen hundred years old; but does the world think it so?—the world, with its thousand cares and crosses, its deep and hidden sorrows, its partings and its tears? Of those amongst the myriads who keep the Yule-tide feast, how many hold it with a chastened joy! For on that day most of all our thoughts go back to other years, to other faces, to other lips that have wished us 'a merry Christmas'; to other hands, which have clasped ours so lovingly, to those who have loved us so long ago!

But Major Lorraine had no sad memories connected with the season as he drove up to the old house, from which duty had so frequently called him, and which he had not seen for five years. In the wide, dark, panelled hall his step-mother stood waiting to welcome him, as gladly as though he had been her own son. He was only a boy when she first came there, when the pink was fresh on her cheek and the gold bright in her hair; they had been drawn to each other then; and through the long years of her widowhood his loving care had helped to lighten her load of sorrow; so it was not wonderful that for months past she had been eagerly looking forward to his return.

The greetings over, they sat down side by side, talking, as those talk after long separation, of past, present, and future; of their acquaintances married, dead, or far away; of things on the estate, prosperous or failures; of the ball to be given next month, of the one they were going to, to-night; of how

much Emma was improved since she 'came out,' how Katharine was considered one of the handsomest girls in the place, and how she might marry Sir Michael Leyland with thirty thousand a year if she liked.

'But why ever doesn't she like?' asked the Major, astonished at this new phase in the character of his worldly-minded sister.

'That is just what troubles me,' answered Mrs Lorraine. 'They are all at the church now, helping to decorate. Louise wanted to stay at home to welcome you, but I sent them all off, so as to have you to myself for an hour. You will see a great alteration in Louise, Ralph.'

'Shall I, mother?' he said smiling. 'I think not. Her letters are the same always; they have altered in style a little of course in the last year or two, but it is the same spirit—the same creature.'

'But not the same face, Ralph. Remember you have not seen her for five years, which have not altered you, but which have changed her from an unformed girl of fourteen to a lovely woman; with that bright changing beauty, which has more charm for a man than regularity of feature. It is a very difficult question.'

'What is a difficult question?' asked Ralph, as his mother paused.

'What to do with Louise.'

'You hinted something of the kind in your last letter, mother,' he said gravely. 'I am sorry, but I must confess this house seems large enough for four women. You know how I am situated; you know the promise which binds me. But tell me,' he added smiling, 'what has Louise done? She seemed to me gentle and tractable enough when I was last at home.'

'I have not the slightest fault to find,' Mrs Lorraine replied; 'you know I am very fond of her. You will think my difficultly very womanish; simply, Louise is too pretty.'

'And some one has told her so,' said Ralph, laughing. 'Go on.'

'It is not that; but I cannot bear to see my own child's happiness destroyed by another, who, if not a stranger, has at least no claim upon her.'

Ralph frowned slightly. 'Perhaps not,' he answered; 'the claim is upon me, and it is a sacred one. So,' he continued, 'it is a case of rivals, I see.' 'Simply this, Ralph. You remember the Levesons of Leigh Court, where we are going to-night? Their eldest son is in the —th Dragoons, and has been home on leave. Louise was away when he first came here, and he appeared very much struck with Katharine; and no wonder; she is very handsome. Well—don't laugh at me; I don't like match-making as a rule; but I thought as she seemed interested in him, there was no harm in inviting him sometimes. But as soon as Louise came home, he transferred his attentions to her. Katharine says nothing; but it makes a kind of awkwardness between them. I know she feels it, poor child; though indeed I believe Vere Leveson is simply flirting with Louise.'

Major Lorraine laughed. 'Poor mother!' he said, 'you will have enough to do if you take all your children's love affairs to heart so seriously. These things always right themselves, you know. But I confess I am surprised to hear of Katharine going in for sentiment; I should have thought Sir Michael more in her line. Is that all, mother?'

'No; only the first of my difficulties,' she answered half sadly. 'You know what my health has been for the last few years; you know—Well, you do not wish me to speak of that; but it is better to look in the face of possibility. Suppose anything happened to me, Ralph, what would become of Louise?'

'You speak of what I hope may be far distant, mother,' he answered tenderly. 'But why should you be uneasy about her? In the event of her not marrying, she would always have a home here with me.'

Mrs Loraine shook her head. 'Turn round and look in the glass,' she said; 'thirty-nine is not such a very formidable age.'

He turned, and contemplated his bronzed face in the glass; such a handsome, noble face, telling of a nature that could not act falsely or meanly. The broad square forehead, marred by a sabre-cut, and the dark hair flecked here and there, by the Indian sun, with gray; nothing else to find fault with in the frank kind smile, the fine regular features, the dark true eyes.

'I think there is no fear of my being taken for younger than I am, mother,' he said, smiling.

'It is an awkward position for you, though,' she answered; 'and as I said, a difficult question what to do. We must hope for the best, Ralph. You are going to join the others now, I suppose?'

'Yes; I think I can find my way.'

He went out into the keen frosty air, walking slowly, though it was unpleasantly cold to one accustomed to tropical climates. He was thinking over his mother's words, and knew she was right as to the awkwardness of the position. He saw the peace of the household was troubled, without knowing how to set matters right, and he thought of the old friend who had trusted his child to him. He had vowed she should be happy, and now it seemed a difficult vow to keep; but for the sake of the man who had died for him sixteen long years ago, the pledge then given must be redeemed.

Louise Wrayworth's life had been a bright one hitherto; her guardian's house was the only one she could remember, and he had striven to fill in some degree her father's place. To him, from infancy to womanhood, she had looked up with loving grateful reverence, regarding him, present or absent, as the noblest of created beings.

He reached the old church, and made his way round to the open vestry door. The steps were encumbered with bundles of evergreens; the voices of the workers, who had finished their task, were audible. He pushed the door further open, and went in. The floor was covered with boughs, and around the pillars were wreathed holly and other evergreens in honour of the joyous season. Some of the choristers stood waiting for the choir-practice, and the organist was softly playing *Adagio Fideles*.

'Ralph!' cried a young fresh voice; and a slight fair girl with a merry face sprang up from the floor, with her hands full of the scarlet berries, which fell hither and thither in bright-hued rain, as with complete indifference to the by-standers, she gave the returned soldier a sisterly embrace. 'You dear old thing to come for us!' she exclaimed.

'Emma, Emma!' exclaimed Ralph, laughing and disengaging himself; 'you have not learned to behave any better in five years.'

But his young sister had vanished, and he turned to greet the vicar; and one or two of the ladies he recognised. In a few minutes Emma reappeared; and behind her came a tall fair girl with masses of golden hair, and great beautiful cold blue eyes. She greeted Major Loraine affectionately, but with the quiet stately grace habitual to her. Five years had not changed Katharine Loraine; at twenty-four she was still the same majestic Queen Katharine as at nineteen, with whom he had always had so little sympathy, whose nature he had found so difficult to understand.

'Where is Louise?' he asked presently. 'Is she not here?'

'She went into the churchyard just now,' answered Emma, 'to put a wreath on Nellie Bryant's grave. You remember her, Ralph?'

'Louise's friend?' Yes.

'A *triste* employment for Christmas eve,' observed one of the gentlemen decorators to Katharine, as she stooped to disentangle her dress from a long sprig of ivy.

'Oh, Mr Leveson went to hold a lantern for her,' Katharine answered, with the slightest possible shade of contempt in the silvery tones of her voice; 'and Louise is never *triste*, unless she is by herself.'

The choir was now fully assembled; the organist struck up the anthem, the rest were silent to listen, and Ralph Loraine went out to look for his ward. He came round the east end of the old church, and stood still for a moment in the shadow. There were two people standing at the edge of the path, looking down on the grave at their feet, where the lantern's light shewed the shining holly upon the upright marble cross. It shewed too the face of his friend's child; a beautiful face, as his step-mother had said, with large dark eyes and wavy dusky hair, a clear delicate complexion with a little rose-flush on the cheeks, and full red lips half-parted by the sweetest smile he had ever seen; with the same erect carriage of the head, the same fearless straight regard which had characterised her father.

It was so strange to see her there a woman, whom he had left a mere girl; and as he looked on the fair face, something seemed to whisper that the ideal beauty he had so often dreamed of was before him at last. They moved away, and came slowly nearer, and paused again where he could see her companion; and for a moment he almost hated the man for his youth, and his handsome face, and the deep-blue eyes aflame with passion-fire as they rested on the child of his dead friend; and another whisper which silenced the first, told him how fitted was each for the other.

'If I were lying there,' said Vere Leveson, and Ralph could hear every one of the foolish, softly spoken words, 'would you ever make wreaths for me, I wonder?'

'I don't know.'

'Don't you? I wish you did; for I thought just now I should be glad to be lying there, if you would remember me.'

Ralph had heard enough, and tried to slip away unseen; but the gravel crunched under his feet and betrayed him.

Louise started, and a bright vivid blush covered her face as she sprang forward. 'Lorrie! Oh, how glad I am to see you again!' she cried, as she

took both his hands in hers and lifted her cheek for his kiss.

He felt half sorry she had done so; that and the old childish name put him immediately in his place as guardian, and made him ashamed of his thoughts. 'How you are altered, Louise!' he said, looking down at her admiringly. 'I think I should hardly have known you!'

'I should have known you, Lorrre, anywhere,' she said reproachfully.

'That is rather different,' he said; 'when we once get old, we don't change so quickly.'

'You would not like it if I said you were old, Lorrre. But tell me, am I altered for the worse? or?'

'You have no need to come to me for compliments, surely,' he said smiling.

'I should think more of yours than of any one's,' she whispered, with that sweet dangerous smile: a smile which a man like Ralph Lorraine should have taken as a warning not to feel its influence too often.

'How rude I am!' she said at last.—'Mr Leveson, do you know my guardian?' She turned to her companion, who stood holding the lantern a few yards from them.

'I had the honour of dining in your company once, Major Lorraine,' he answered, stepping forward. 'It is some time ago, when I first joined at Madras; but I will remember my anxiety to see such a distinguished soldier as yourself.'

There was a ring of truth and honest admiration in the words, which raised them above an ordinary compliment, and which made Ralph hold out his hand and answer cordially: 'I have a bad memory for faces, or I think I should have remembered yours.'

'Thanks,' said Vere, laughing. 'We shall have the pleasure of seeing you to-night, I hope?'

'Yes; my mother told me of the invitation.'

'Of course he is coming,' said Louise. 'And you will dance with me all the evening, Lorrre; won't you?'

'Not quite all, Miss Wrayworth; please, don't forget my waltzes,' said Vere, holding out his hand. 'I must be off now; so good-bye for the present. You won't forget?'

She looked up quickly. 'Perhaps,' the lips said laughingly; but the dark eyes gave a sweet silent answer Ralph did not see, though he was watching them. But after Vere Leveson had gone, he walked home beneath the Christmas stars, with Louise's hand resting on his arm, dreaming as he went, a fair, fond, foolish dream.

The Christmas-eve ball at Leigh Park was a regular institution, one which Sir Harry Leveson had kept up for years. It was a pretty sight, Ralph thought, as he stood leaning against a window, and looking round to select a partner. And amongst all the fair women, the one he thought the fairest was his young ward Louise Wrayworth, in her white floating dress, with its wreaths of holly, and the red clustering berries in her hair.

Ralph had been watching Vere Leveson, trying to decide in his own mind whether Mrs Lorraine's verdict of flirtation was a just one; and he judged that it was; for the attentions of the young officer were apparently equally divided between Louise and Katharine. Ralph did not happen to

be near when, later on, he led Louise to one of the cool empty rooms, where through the open window could be heard the merry Christmas bells. He did not see the hand-clasp or the light that flashed in the eyes of each. He did not hear the hurried whisper: 'Louise, you won't forget me, you will trust me till next Christmas-time?'

The ball was over, the rooms were dark and silent; the whole world waited for the sun to rise on Christmas-day.

IS THE TELEPHONE A PRACTICAL SUCCESS?

In September last appeared in this *Journal* an article entitled 'Singing and Talking by Telegraph;' and in that paper we attempted to describe the mechanism of that wonderful little instrument the telephone. It is now our purpose to say something regarding the progress that has been made towards perfecting the invention; but in order to make the article as clear as possible, we venture once more upon a few words explanatory of the instrument.

The telephone as it is now made is an exceedingly simple-looking apparatus similar in appearance to a stethoscope; to the handle of a girl's skipping-rope; or better still, to a large-sized penny wooden trumpet. Inside this hollow cylinder, and within an inch or so of the wider end, is fixed a plate of iron as thin as a well-worn sixpence, and about the size of a half-crown piece. This is called the diaphragm. Behind the diaphragm, nearly touching it, and extending to the narrower end of the cylinder, is a piece of 'soft' iron enveloped in wire coils, with a permanent magnet beyond. Outside the narrower end of the cylinder, and communicating with the coils that surround the iron inside, are attached two screws or 'terminals,' which are 'joined up' to a main wire, communicating with the distant or receiving telephone wherever that may be, and which is precisely similar to the one we have described. When we apply our mouth to the bell-shaped end of the apparatus, and speak or shout or sing, we set the diaphragm vibrating as in a tuning-fork; the vibrations thus created are electrically communicated through the wire to a distant telephone, and are repeated on its diaphragm with more or less distinctness.

It is known that the motion of an iron plate contiguous to the poles of a magnet creates a disturbance of electricity in coils surrounding those poles; and the duration of this current will coincide with the vibratory motion of the plate or diaphragm. When, therefore, the human voice (or any other suitable sound) impinges through the tube against this diaphragm, the diaphragm begins to vibrate, and awakens, so to speak, electrical action in the coils of wire surrounding the poles of the magnet; not a current, but a series of undulations, something like those produced by the voice in the air around us. In short the telephone is an apparatus designed to transmit sound through a wire of indefinite length; the voice being, so to speak, 'converted

into electricity at one end, the electricity becoming voice at the other.

With these few explanatory remarks, we now proceed to offer to our readers the following interesting experiments made by a gentleman well skilled in telegraphy.

'Journalists,' he says, 'with no special knowledge of the difficulties the invention has to encounter as a telegraph instrument, have expatiated in such enthusiastic terms upon the results said to have been achieved by the telephone, that a somewhat exaggerated notion of its powers and capabilities has been accepted by the general public. It appears, therefore, to the writer of those lines that a statement of the experiences of a person practically engaged in the work of telegraphy may assist in placing the phenomena of the telephone on a proper footing.

'Scientifically, the telephone is a great and undoubted success; and a person would be grievously in error if, because of some undoubted hindrances to its practical use, he pronounced it unworthy of further experiment. The emergence of telegraphy from the domain of experiment into that of daily practical use is a fact so undoubted, and one with which we are now so familiar, that it is impossible to say at what moment the telephone, at present a scientific toy, may become a daily necessity not only of telegraphic but of ordinary commercial work.

'Being engaged in daily contact with a large telegraphic centre, and in association with men who have the command of every means of testing the invention in a practical work-a-day manner, the writer was able to gauge pretty accurately the range within which the telephone can work. It must be understood, however, that in recording the effects observed by him and his associates, he has no desire to invalidate, or even to call in question the experiences of others who may have been able to arrive at better results. The telephone is in the hands of some of the first electricians and telegraphists of the day, and differences of conditions (not to speak of differences of capacity on the part of the operator) may give variety in the observations made. The very difficulties and drawbacks now to be recorded will no doubt some day suggest to a master-mind the method by which they may be overcome. But till that day arrives, the telephone must be content to remain where the writer leaves it, an undoubted success from a scientific point of view, but overwhelmed with obstacles to its practical use, in this country at least, in general telegraphy.

'When a telegraphist first gets into his hand this beautifully simple and electrically delicate instrument, his first inclination is to test its carrying-power. This is of course a closet experiment, not working with actual telegraph line, but with "resistance" equivalent to a telegraph line of stated length. An experiment of this nature gives better results than could be obtained by a veritable line, because the insulation is, so to speak, perfect. No leakage at undesigned points of contact, or disturbance from unfavourable atmospheric conditions, is felt, and the experiment is entirely under the observer's control. The apparatus used is designed to offer the same labour for the electric current to overcome, as would be offered by a stated length of outside telegraph line. This artificial resistance is nicely graduated, and as

the method of testing was suggested by Ohm, a German electrician, the unit of resistance is, as we once previously explained, termed an "ohm." Removing the telephone to such a distance that the two observers were "out of earshot," the test with resistance was tried, and with a resistance of one thousand ohms—roughly speaking, equal to seventy miles of a well-constructed line—the sound was perfect, although not very loud. Every articulation of the speaker at the other end could be distinguished so long as silence was maintained in the room, or so long as no heavy lorry rumbling over the stones outside sent in harsh noises which drowned the faint whisper of the instrument. The resistance was gradually raised to four thousand ohms—nearly three hundred miles—with like favourable results; and for some little distance beyond, articulation could still be made out. But by the time ten thousand ohms had been applied, putting the speaker at a distance of, say, seven hundred miles, sound only, but not articulate sound, reached the ear. The tone was there, and every inflection of the voice could be followed; but articulation was absent, although the listener strove every nerve to catch the sound, which the speaker, as was afterwards ascertained, was shouting in a loud clear voice. The prolonged notes of an air sung could be heard with the resistance named, but again no words could be distinguished. The voice, whether in speaking or singing, has a weird curious sound in the telephone. It is in a measure ventriloquial in character; and with the telephone held an inch or two from the ear, it has the effect as if some one were singing far off in the building, or the sound were coming up from a vaulted cellar or through a massive stone wall.

'Proceeding to our next experiment, we joined up the telephones in one office to several wires in succession, putting ourselves in circuit with lines going to various distances and working with different instruments. When this was done, the real obstacle to telephonic progress at once asserted itself in the shape of "induction." The first wire experimented with was partly "overhouse" and partly underground, and the offices upon it were working Wheatstone A B C instruments. It is difficult to render clear to the person ignorant of telegraphic phenomena the idea expressed by the word *induction*. Briefly it may be put thus, that when a strong electric current is passing on a wire, it has the faculty of setting up a current of opposite character in any wire not then working, or working with a feebler current, that may be in its vicinity. The why or the wherefore cannot be explained, but there is the fact.

'In various recent articles on the telephone, mention has been made of "contact" as the cause of disturbance. This word, however, although it has been used by telegraphists, is misleading, and can only be used as an endeavour to express popularly an electric fact. Actual contact of one wire with another would spoil the business altogether. A wire bearing an electric current seems to be for the time surrounded, to an undefined distance, by an electric atmosphere, and all wires coming within this atmosphere have a current in an opposite direction set up in them. This is as near an explanation of the phenomena of induction as the state of telegraph science at present affords. Now the telephone works with a very delicate magnetic

current, and is easily overpowered by the action of a stronger current in any wire near which the telephone wire may come. To work properly it "requires a silent line."

"In the place where the observations were made, there are a large number of wires travelling under the floor through the test-box, along passages to the battery-room and to a pole on the outside, whence they radiate, or out to a pipe underground, where many gutta-percha-covered wires lie side by side. On applying the ear to a telephone joined into a circuit working in such an office a curious sound is heard, comparable most nearly to the sound of a pot boiling. But the practised ear could soon separate the boiling into distinct sounds. There was one masterful Morse instrument—probably on the wire lying nearest the one on which we were joined up

—whose peremptory "click, oil-i-ck, click," representing "dot, dash, dot," on the printed slip we read from, could be heard over all. Then there was the rapid whirr of a Wheatstone fast-speed transmitter, sending dots and dashes at express speed by mechanical means; the sharp well-pronounced rattle in sounds of equal length of a needle instrument; and most curious of all, the "rrrr-op, r-r-op, rrrrrrrrrrr-op, rrrrr-op, r-r-op" of the A B C, the deadliest foe to the telephone in its endeavours to gain admission into the family of telegraph instruments. There may be reason in this, for as the Wheatstone A B C is the instrument used for private telegraphy, or for the least important public offices, because it requires no "code" to be learned by the manipulator, so it would likely be the first to be displaced if an acoustic telegraph permanently took the field. So the sentient little A B C opens its mitrailleuse fire on the intruder, on whose delicate currents, in the words of an accomplished electrician, it plays "old harry." The peculiar character of the sounds we borrow on the telephone from this instrument arises from the fact that as the needle flies round the dial, a distinct current or pulsation passes for each letter, and the final "op" we have tried to represent shews the stoppage of the needle at the letters as words were spelled out.

"It must not be understood that the sounds of those various instruments are actually heard in the telephone. What happens is, that the currents stealing along the telephone wire by induction produce vibrations in the diaphragm of that instrument, the little metal membrane working on the magnet in ready response to every current set up in the latter. When it is remembered that the principle of the telephone is that the sound-caused vibrations in the filmy diaphragm at one end create similar but magnetically-caused vibrations in the diaphragm at the other end, and so reproduce the sound, it will be obvious why the rapid roll of the A B C currents, or the swift sending of the fast-speed transmitter, when brought by induction into the telephone wire, cause disturbances in the sound vibrations, and thereby cripple the instrument. One instrument of either kind named would have a certain effect, but one Morse or single needle would not have any greatly prejudicial effect. But a number of Morses or needles going together, such as were heard in our experiments, would combine to be nearly as bad as one A B C or fast-speed Morse. So delicate is the diaphragm to

sound (and necessarily so), that in all experiments with the telephone itself, such as those with "resistance," or those made at home to test the instrument apart from telegraphic considerations, every sound from without broke in, giving an effect like the well-known "murmur of the shell."

"Joining up our wire now to a more distant station at some miles along the railway, and having on its poles a number of what are known as "heavy" circuits, the pot-boiling sound assumed even more marked characteristics. The A B C no longer affected us; but a number of Morse instruments were in full gear, and the fast-speed transmitter was also at work. While we were listening, the circuit to which we were joined began to work, and the effect was literally electrical. Hitherto we had only borrowed currents—or, seeing they were so unwelcome, we might call them currents thrust upon us—and the sounds, though sharp and incessant, were gentle and rather low. But when the strong current was set up in the wire itself, the listener who held one of our telephones nearly jumped from the floor when an angry "pit-pat, pit-pat, pit-pat-pit" assailed his ear, causing him to drop the instrument as if he had been shot! It was a result none of us had expected, for it did not seem possible that the delicate metal diaphragm and the little magnet of the telephone could produce a sound so intense. Of course it was only intense when the ear was held close to the orifice of the instrument. Held in the hand away from the ear, the telephone now made a first-rate "sampler," and we could tell without difficulty not only the signals that were passing, but found in it a more comfortable tone than that given by the Morse sander in common use.

"Other experiments of a like character led to results so similar, that they may be left unnoticed; and we proceed now to describe one of a different character, designed to test the telephone itself. At a distance of about half a mile, access was obtained to a Morse instrument in private use, and joined to the office by "overhouse" wire. Dividing our party and arranging a programme of operations, two remained with a telephone in the office, while other two, of whom the writer was one, proceeded with the second telephone to the distant instrument. By an arrangement which a practical telegraphist will understand, the key of the Morse was kept in circuit, so that signals could be exchanged in that way. It may be noticed, however, that this was hardly necessary, as the diaphragm of the telephone can be used as a key, with the finger or a blunt point, so that dot and dash signals are interchangeable, should the voice fail to be heard. As the wire in this instance travelled almost alone over part of its course, we were in hopes that induced currents would be conspicuous by their absence. In this we were, however, disappointed, for the pot was boiling away, rather more faintly, but with the "pop-pop-pop" distinctly audible, and once more a sharp masterful Morse click was heard coming in now and again. The deadly A B C was, however, absent, so that our experiment proved highly successful. For some reason or another—probably an imperfect condition of the wire, or the effects of "induction" over and above what made itself audible to us—the spoken sounds were deficient in distinctness; but songs sung at either end were very beautifully heard, and indeed the sustained note of sung words had

always a better carrying-power than rapidly spoken words. Every syllable, and every turn of melody of such a song as *My Mother bids me bind my Hair*, sung by a lady at one end, or *When the Heart of a Man*, sung at the other, could be distinctly heard, but with the effect before noticed, that the voice was muffled or shut in, as if the singer were in a cellar, while it was not always possible to say at once whether the voice was that of a man or a woman.

'In the course of some domestic experiments, it was remarked that in playing the scale downwards from C in alt. on the piano, the result to the listener was a "tit" only for the four upper notes, although all below that had a clear "ting," and the octaves below were mostly distinct, although at the low notes of the piano the sound was again lost. The ringing notes of a musical box were not so successful, but with close attention, its rapid execution of *Tommy Dodd* could be well enough made out. An endeavour was made to catch the ticking of a watch, but this was not successful, and the experiment is not recommended, as the near presence of a watch to a magnet is not desirable; and the watch exposed to it in this instance was, it is thought, affected for a short time thereafter, although it received no permanent damage.

'The observations made in the course of these experiments convinced those present that the telephone presents facilities for the dangerous practice of "tapping the wires," which may make it useful or dangerous, according as it is used for proper or improper purposes. It might be an important addition for a military commander to make to his flying cavalry; as an expert sound-reader, accompanying a column sent to cut off the enemy's telegraph connections, might precede the act of destruction by robbing him of some of his secrets. The rapidity and simplicity of the means by which a wire could be "milked," without being cut or put out of circuit, struck the whole of the party engaged in the various trials that are described above. Of course the process of tapping by telephone could not be carried out if the instrument in use was an A B C or single needle, or if the wire was being worked duplex or with a fast-speed Morse, for in these cases the sounds are too rapid or too indefinite to be read by ear. The danger is thus limited to ordinary sounder or Morse telegraphs; but these still form the mainstay of every public system.

'Since the trials above described were made, the newspapers have recorded a beautiful application by Sir William Thomson, of the electric part of the telephone to exhibit at a distance the motions of an anemometer; the object being to shew the force of air-currents in coal-mines. This is a useful application of an electric fact, and doubtless points the way to further discoveries. But it is to be noticed that the experiment, interesting as it is, hardly comes under the head of a *telephone*, what is reproduced at a distance being not sound but motion.

'Obviously the invention cannot rest where it is; and no one more readily than the practical telegraphist will welcome an instrument at once simple, direct, and reliable. Even in its present form the telephone may be successfully used where its wire is absolutely isolated from all other telegraph wires. But the general impression is

that its power of reproducing the sound must be intensified before its use can become general even as a substitute in works or offices for the speaking-tube.'

SINGING MICE.

THESE interesting animals are said to be smaller than ordinary mice, to be usually of a brownish colour, and to have long ears. Naturalists have not come to any exact reason as to why they sing. Some persons impute the singing to disease, as in the wheezing of any one from a cold. Others attribute it to an internal parasite. But these seem unsatisfactory explanations; for when the little creatures sing they are as lively as common domestic mice. The faculty of singing in a small way with various modulations appears to be quite natural to the animals. It has been noticed that during their musical performances there is a throbbing in the throat, and that the snout is elevated in giving play to the voice, as in the warbling of birds. The song or warble of these mice is said to be sweet and varied. Hitherto not much attention has been given by zoologists to the phenomenon; but we observe by various notices in *Land and Water* and in *Nature*, two periodicals devoted to pleasant discussions on subjects of natural history, &c., that singing mice are becoming objects of careful investigation.

An amusing account of a singing mouse appears in *Nature*, Nov. 9, from the pen of Mr Joseph Sidebotham, dating from Menton, south of France.

'Last winter we occupied the rooms we now do at Menton. Early in February we heard as we thought the song of a canary, and fancied it was outside our balcony; however, we soon discovered that the singing was in our *salon*, and that the songster was a mouse. At that time the weather was rather cold, and we had a little fire, and the mouse spent most of the day under the fender, where we kept it supplied with bits of biscuit. In a few days it became quite tame, and would come on the hearth in an evening and sing for several hours. Sometimes it would climb up the chiffonier and ascend a vase of flowers to drink at the water, and then sit and sing on the edge of the table and allow us to go quite near to it without ceasing its warble. One of its favourite haunts was the wood-basket, and it would often sit and sing on the edge of it. On February 12, the last night of the Carnival, we had a number of friends in our *salon*, and the little mouse sang most vigorously, much to their delight and astonishment, and was not in the least disturbed by the talking. In the evening the mouse would often run about the room and under the door into the corridor and adjoining rooms, and then return to its own hearth. After amusing us for nearly a month, it disappeared; and we suspect it was caught in a trap set in one of the rooms beyond. The mouse was small and had very large ears, which it moved about much whilst singing. The song was not unlike that of the canary in many of its trills, and it sang quite

as beautifully as any canary, but it had more variety, and some of its notes were much lower, more like those of the bullfinch. One great peculiarity was a sort of double song, which we had now and then—an air with an accompaniment. The air was loud and full, the notes being low and the accompaniment quite subdued. Some of our party were sure that there was more than one mouse, until we had the performance from the edge of the wood-basket and were within a yard or two of it. My son has suggested that many or all mice may have the same power, but that the notes are usually so much higher in the scale that, like the cry of the dormouse and the bat, they are at the verge of the pitch to which the human ear is sensitive. This may be so; but the notes of our mouse were so low, and even the highest so far within the limits of the human ear, that I am inclined to think the gift of singing in mice is but of very rare occurrence.

In the same periodical, the following additional particulars as regards singing mice are presented by Mr George J. Romanes, Regent's Park.

"Several years ago I received some of these animals from a friend, and kept them in confinement for one or two months. The description which your correspondent gives of their performance leaves very little to be added by me, as in all respects this description agrees perfectly with my own observations. I write, however, to remark one curious fact about the singing of these mice, namely, that it seemed to be evoked by two very opposite sets of conditions. When undisturbed, the little animals used for the most part to remain quiet during the day, and begin to sing at night; but if at any time they were alarmed, by handling them or otherwise, whether during the day or night, they were sure to sing vigorously. Thus the action seemed to be occasioned either by contentment or by fear. The character of the song, however, was slightly different in the two cases.

"That these mice did not learn this art from singing birds there can be no doubt, for they were captured in a house where no such birds were kept. It may be worth while to add that this house (a London one) seemed to have been suddenly invaded, so to speak, by a number of these animals, for although my friend has lived in this house since the year 1862, it was only during a few months that singing mice were heard in it, and during these few months they were heard in considerable numbers."

As corroborative of the foregoing notices, we give the following very interesting account of a singing mouse, obligingly sent to us by a correspondent, Mr Alfred Wright.

"In the early spring of last year I was invited by an old widow lady to see a singing mouse, which she had at night heard singing and scratching beneath the floor of her bed, and been so fortunate as to catch in a trap. I went, and found the little animal in a cage with a revolving wheel, similar to that in which a squirrel is usually confined. Whether the mouse was shy at the presence of a stranger, I do not know. It remained silent; but at length, after my patience had been nearly exhausted, it began to sing in clear warbling notes like those of a bird. When I called the next evening to hear the mouse again, I heard him to perfection; and was so filled with interest in the

novelty, that I begged permission to bring any friend who was a sceptic of the fact, or who might desire to see the phenomenon. My request was readily granted. One friend of course had heard of a singing mouse, but he certainly would not allow that a prolonged squeak was a song—not he! Another friend of course had heard a mouse sing when he was a boy; but he was told, he perfectly well remembered, that the note quoted by the mouse was the result of some internal disease. Well, both of these went with me to hear the little creature. Unfortunately, at first it was again shy; but after an interval of silence it commenced to sing—sweetly, like the low notes, the jug, of the nightingale. My friends had come, had heard, and were conquered! The one acknowledged it was really a song and not a squeak; the other, that the noise was certainly dulcet; but still he thought it possibly might be the result of disease, and not natural to the little animal. We suggested that this wonderful natural curiosity (as we deemed it) should be sent to an eminent naturalist who resided near. Great, therefore, was my astonishment and pleasure when it was presented to me, who could only treat it like a schoolboy would his white mouse—as a pet. And truly it became a great pet to both my wife and myself.

"In form, the singing mouse did not differ from his humbler brethren; but in colour he was of a darkish brown, and had very bright eyes. It soon became used to the presence of my wife, and sang constantly while revolving the wheel of his cage. The notes proceeded from the throat. He became exceedingly gentle, and was pleased at being caressed.

"I deemed him so rare a curiosity that I ventured to offer to exhibit him to the distinguished naturalist referred to above, and in my letter described the little creature and its peculiarities, as I have done here. The naturalist most courteously replied: "The case of the singing mouse is very extraordinary, but the fact is now well established. . . . The best account which has ever been published is by an American naturalist, and I have given an abstract of his account in my *Descent of Man*."

"The American referred to is the Rev. S. Lockwood, author of *The American Naturalist*, and he gives an account of his observations of the *Heptomys cynagatæ*, an American species, belonging to a genus distinct from that of the English mouse. This little animal gave two chief songs. Mr Lockwood gives both songs in musical notation; and adds, that though this mouse 'had no ear for time,' yet she would keep to the key of B (two flats) and strictly in the major key. . . . Her soft clear voice falls an octave with all the precision possible; then at the wind up it rises again into a very quick trill in C sharp and D." I have made this quotation, as it far better describes the peculiar qualifications of a singing mouse, than my inexperienced observations could announce.

"My mouse remained in continued confinement upwards of a year, feeding upon a little sopped bread and canary-seed; and great was the grief of my wife (who was his keeper) and myself when he was found dead in his little nest. During the previous evening he had been heard singing with more than usual ardour."

We shall probably return to this interesting subject.

USING UP WASTE SUBSTANCES.

THE subject denoted by the above title, more than once treated in the *Journal*, is adverted to by an obliging Lancashire correspondent who, surrounded by one of the busiest and most ingenious clusters of townsmen in England, has had his attention drawn to various substances waiting (as it were), for application to useful purposes. His suggestions are not wholly new, having to some extent been already anticipated; but they are sufficiently valuable to call for notice here.

One relates to the waste that presents itself in the processes of manufacturing cotton. A residue known technically as *willowings*, that falls into a receptacle during the preparatory beating and disentangling of raw cotton-wool, consists of a dusty heap of seed-husks and short broken fibres. It is used by farmers to absorb the liquid manure of their cowsheds and middens or dung-heaps. Although some of the cottony fibre may be separated through a sieve, so much adheres to the seed-husk as to render it unsuitable for paper-making, for which it has often been tried. The suggestion now made is, that though unfitted for paper, this refuse may possibly be found useful in the manufacture of millboard. Large quantities of this tough and durable product are employed for bookbinding, for making the discs of railway wheels, &c.; and as colour is not a matter of moment, the idea is that the mingled residue of cottony fibre and seed-husk might be rendered available. It is known that millboard made from wood-pulp is imported to a considerable extent from abroad; and we are told that 'a large portion of the private income of the great German Chancellor Prince Bismarck is derived from the manufacture of wood-millboard on his Varzin estate.' Many hundred tons of willowings could be obtained in Lancashire at a very cheap rate, even as low as two shillings per hundredweight.

Another suggestion bears relation to the utilisation of refuse from the manufacture of prussiate of potash, a most valuable product in the hands of the manufacturing chemist. The prussiate is obtained in large ratio from woollen rags, after the separation of all the pieces that can be worked up into shoddy for cheap cloth. The refuse is calcined in cast-iron retorts, lixiviated with water, and drained off for subsequent treatment: leaving behind it a thick black sediment of impure animal charcoal. The suggestion relates to the application of this residue to the manufacture of blacking—a humble but valuable agent for those who appreciate tidiness in the appearance of boots and shoes and economy in the preservation of leather. If useful for this purpose, it might be found advantageous and economical as an ingredient in printers' ink. Whether this carbon residue is at present applied to any other useful purpose, we are not fully informed.

A third suggestion relates to the preparation of animal size for the carpet-manufacture and for that of many kinds of woollen and worsted goods. This size is made from the clippings and scrapings of skins and hides, from rejected scraps of parchment and vellum, and from the worn-out buffalo skin pickers and skips largely used in textile manufactures; also from the pith of cattle-horns, which contain a large amount of valuable gelatine. The suggestion is, to utilise the refuse left after

making this size. One large carpet factory in Yorkshire rejects as utterly useless a ton or more of this refuse every week. The horn-pith contains as one of its components phosphate of lime, and is on that account recommended to the notice of the manufacturers of chemical manures on a large scale.

One more suggestion comes from our ingenious correspondent. Old corks are applicable to a greater number of purposes than we are generally in the habit of supposing. That many of them are ground up to make cork-stuffing for cushions, padding, &c. is well known; but there are other uses for them as corks or half corks, besides making floating buoys and life-preservers. A tavern in a Lancashire town covered the floor of his lobby and bar with very open rope-matting, and filled up the openings with old corks cut down to the level of the surface of the mats. This combination is found to be almost indestructible under the feet; while it gives a good grip or foothold. As the making of rope-mats is one of the trades carried on in reformatories and some other large establishments, it is suggested that the managers should take into consideration the feasibility of adding old corks to their store of manufacturing materials.

As this *Journal* finds its way into every corner of the busy hives of industry, it may possibly be that some of our readers are already acquainted with such applications of waste refuse to useful purposes as those which our esteemed correspondent suggests. But this is a point of minor importance. The primary question is, not whether an idea is absolutely new, but whether it is practically susceptible of useful application. The history of manufactures teaches us that apparently humble trifles like these have proved to be worth millions sterling to the country.

LET BYGONES BE BYGONES.

LET bygones be bygones; if bygones were clouded

By aught that occasioned a pang of regret,
Oh, let them in darkest oblivion be shrouded;
'Tis wise and 'tis kind to forgive and forget.

Let bygones be bygones, and good be extracted
From ill over which it is folly to fret;
The wisest of mortals have foolishly acted—
The kindest are those who forgive and forget.

Let bygones be bygones; oh, cherish no longer
The thought that the sun of Affection has set;
Relapsed for a moment, its rays will be stronger,
If you, like a Christian, forgive and forget.

Let bygones be bygones; your heart will be lighter,
When kindness of yours with reception has met;
The flame of your love will be purer and brighter
If, Godlike, you strive to forgive and forget.

Let bygones be bygones; oh, purge out the leaven
Of malice, and try an example to set
To others, who craving the mercy of heaven,
Are sadly too slow to forgive and forget.

Let bygones be bygones; remember how deeply
To heaven's forbearance we all are in debt;
They value God's infinite goodness too cheaply
Who heed not the precept, 'Forgive and forget.'

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THE ROMANCE OF ACCIDENT.

MANY of our most important inventions and discoveries owe their origin to the most trivial circumstances; from the simplest causes the most important effects have ensued. The following are a few culled at random for the amusement of our readers.

The trial of two robbers before the Court of Assizes of the Basses-Pyrénées accidentally led to a most interesting archaeological discovery. The accused, Rivas a shoemaker, and Bellier a weaver, by armed attacks on the highways and frequent burglaries, had spread terror around the neighbourhood of Sisteron. The evidence against them was clear; but no traces could be obtained of the plunder, until one of the men gave a clue to the mystery. Rivas in his youth had been a shepherd-boy near that place, and knew the legend of the Trou d'Argent, a cavern on one of the mountains with sides so precipitous as to be almost inaccessible, and which no one was ever known to have reached. The Commissary of Police of Sisteron, after extraordinary labour, succeeded in scaling the mountain, and penetrated to the mysterious grotto, where he discovered an enormous quantity of plunder of every description. The way having been once found, the vast cavern was afterwards explored by savants; and their researches brought to light a number of Roman medals of the third century, flint hatchets, ornamented pottery, and the remains of ruminants of enormous size. These interesting discoveries, however, obtained no indulgence for the accused (inadvertent) pioneers of science, who were sentenced to twenty years' hard labour.

The discovery of gold in Nevada was made by some Mormon immigrants in 1850. Adventurers crossed the Sierras and set up their sluice-boxes in the cañons; but it was gold they were after, and they never suspected the existence of silver, nor knew it when they saw it. The bluish stuff which was so abundant and which was silver ore, interfered with their operations and gave them the greatest annoyance. Two

brothers named Grosch possessed more intelligence than their fellow-workers, and were the real discoverers of the Comstock lode; but one of them died from a pickaxe wound in the foot, and the other was frozen to death in the mountains. Their secret died with them. When at last, in the early part of 1859, the surface croppings of the lode were found, they were worked for the gold they contained, and the silver was thrown out as being worthless. Yet this lode since 1860 has yielded a large proportion of all the silver produced throughout the world. The silver mines of Potosi were discovered through the trivial circumstance of an Indian accidentally pulling up a shrub, to the roots of which were attached some particles of the precious metal.

During the Thirty Years' War in Germany, the little village of Coserow in the island of Usedom, on the Prussian border of the Baltic, was sacked by the contending armies, the villagers escaping to the hills to save their lives. Among them was a simple pastor named Schwerdler, and his pretty daughter Mary. When the danger was over, the villagers found themselves without houses, food, or money. One day, we are told, Mary went up the Strekelberg to gather blackberries; but soon afterwards she ran back joyous and breathless to her father, with two shining pieces of amber each of very great size. She told her father that near the shore the wind had blown away the sand from a vein of amber; that she straightway broke off these pieces with a stick; that there was an ample store of the precious substance; and that she had covered it over to conceal her secret. The amber brought money, food, clothing, and comfort; but those were superstitious times, and a legend goes that poor Mary was burned for witchcraft. At the village of Stämen, amber was first accidentally found by a rustic who was fortunate enough to turn some up with his plough.

Accidents have prevented as well as caused the working of mines. At the moment that workmen were about to commence operations on a rich gold mine in the Japanese province of Tsungou,

a violent storm of thunder and lightning burst over them, and the miners were obliged to seek shelter elsewhere. These superstitious people, imagining that the tutelary god and protector of the spot, unwilling to have the bowels of the earth thus rifled, had raised the storm to make them sensible of his displeasure, desisted from all further attempts to work the mine.

A cooper in Carniola having one evening placed a new tub under a dropping spring, in order to try if it would hold water, when he came in the morning found it so heavy that he could hardly move it. At first, the superstitious notions that are apt to possess the minds of the ignorant made him suspect that his tub was bewitched; but at last perceiving a shining fluid at the bottom, he went to Laubach, and shewed it to an apothecary, who immediately dismissed him with a small gratuity, and bid him bring some more of the same stuff whenever he could meet with it. This the poor cooper frequently did, being highly pleased with his good fortune; till at length the affair being made public, several persons formed themselves into a society in order to search farther into the quicksilver deposits, thus so unexpectedly discovered, and which were destined to become the richest of their kind in Europe.

Curious discoveries by ploughmen, quarrymen, and others of caves, coins, urns, and other interesting things, would fill volumes. Many valuable literary relics have been preserved by curious accidents, often turning up just in time to save them from crumbling to pieces. Not only mineral but literary treasures have been brought to light when excavating mother earth. For instance, in the foundations of an old house, Luther's *Table Talk* was discovered 'lying in a deep obscure hole, wrapped in strong linen cloth, which was waxed all over with beeswax within and without.' There it had remained hidden ever since its suppression by Pope Gregory XIII. The poems of Propertius, a Roman poet, long lurked unsuspected in the darkness of a wine-cellar, from whence they were at length unearthed by accident, just in time to preserve them from destruction by rats and mildew. Not only from beneath our feet but from above our heads may chance reveal the hiding-places of treasure-trove. The sudden falling in of a ceiling, for example, of some chambers in Lincoln's Inn revealed the secret depository of the Thurlow state papers. Other literary treasures have turned up in an equally curious manner. Milton's essay on the *Doctrines of Christianity* was discovered in a bundle of old despatches: a monk found the only manuscript of Tacitus accidentally in Westphalia: the letters of Lady Mary Montagu were brought to light from the recesses of an old trunk: the manuscripts of Dr Dee from the secret drawer of an old chest: and it is said that one of the cantos of Dante's great poem was found, after being long mislaid, hidden away beneath a window-sill.

It is curious to trace how the origin of some famous work has been suggested apparently by the merest accident. We need but remind the reader how Lady Austen's suggestion of 'the sofa' as a subject for blank verse was the beginning of *The Task*, a poem which grew to formidable proportions under Cowper's facile pen. Another exemplar

What great events from trivial causes spring,

is furnished by Lockhart's account of the gradual growth of *The Lay of the Last Minstrel*. The lovely Countess of Dalkeith hears a wild legend of Border *diablerie*, and sportively asks Scott to make it the subject of a ballad. The poet's accidental confinement in the midst of a yeomanry camp gave him leisure to meditate his theme to the sound of the bugle; suddenly there flashes on him the idea of extending his simple outline so as to embrace a vivid panorama of that old Border life of war and tumult. A friend's suggestion led to the arrangement and framework of *The Lay* and the conception of the ancient Harper. Thus step by step grew the poem that first made its author famous. The manuscript of *Waverley* lay hidden away in an old cabinet for years before the public were aware of its existence. In the words of the Great Unknown: 'I had written the greater part of the first volume and sketched other passages, when I mislaid the manuscript; and only found it by the merest accident, as I was rummaging the drawer of an old cabinet; and I took the fancy of finishing it.'

Charlotte Brontë's chance discovery of a manuscript volume of verses in her sister Emily's handwriting led, from a mutual confession of the *juvénescence*, to the joint publication of their poems, which though adding little to their subsequent fame, at least gives us another instance of how much of what is called chance has often to do with the carrying out of literary projects. It was the burning of Drury Lane Theatre that led to the production of *The Rejected Addresses*, the success of which, says one of the authors, 'decided him to embark in that literary career, which the favour of the novel-reading world rendered both pleasant and profitable to him.' Most of us know how that famous fairy tale *Alice in Wonderland* came to be written. The characters in *Oliver Twist* of Fagin, Sikes, and Nancy were suggested by some sketches of Cruikshank, who long had a design to shew the life of a London thief by a series of drawings. Dickens, while paying Cruikshank a visit, happened to turn over some sketches in a portfolio. When he came to that one which represents Fagin in the condemned cell, he studied it for half an hour, and told his friend that he was tempted to change the whole plot of his story, not to carry Oliver through adventures in the country, but to take him up into the thieves' den in London, shew what this life was, and bring Oliver through it without sin or shame. Cruikshank consented to let Dickens write up to as many of the drawings as he thought would suit his purpose. So the story as it now runs resulted in a great measure from that chance inspection of the artist's portfolio. The remarkable picture of the Jew malefactor in the condemned cell biting his nails in the torture of remorse, is associated with a happy accident. The artist had been labouring at the subject for several days, and thought the task hopeless; when sitting up in his bed one morning with his hand on his chin and his fingers in his mouth, the whole attitude expressive of despair, he saw his face in the cheval glass. 'That's it!' he exclaimed; 'that's the expression I want.' And he soon finished the picture.

The sudden prosperity of many a famous painter has resulted from some fortunate accident. Anthony Watteau, when a nameless struggling artist, timidly offered a painting to a rich picture-

dealer for six francs, and was on the eve of being scornfully rejected, had not a stranger, who happened to be in the shop, come forward, and seeing some talent in the work, spoke encouragingly to the youth, and offered him one hundred and fifty francs for the picture; nor was this all, for he became Watteau's patron and instructor.—One day a little shepherd-boy was seated near the road-side on the way from Vespignano to Florence drawing upon a polished stone, his only pencil another polished stone which he held in his tiny fingers. A richly dressed stranger, who had descended from a conveyance that was following him, chanced to pass, and looking over the boy's shoulder, saw that he had just sketched with wonderful truth and correctness a sheep and its twin lambs. Surprised and pleased, he examined the face of the young artist. Certainly it was not its beauty that attracted him. The child looked up, but with such a marvellous light in his dark eyes, that the stranger exclaimed: 'My child, you must come with me; I will be your master and your father: it is some good angel that has led me here.' The stranger was Cimabue, the most celebrated painter of that day; and his pupil and protégé became the famous painter, sculptor, and architect Giotto, the friend and admiration of Dante and Petrarch.

How the fortunes of painters may hinge upon the most trifling circumstances, has another example in that of Ribera or Spagnoletto, which was determined by a very simple incident. He went to reside with his father-in-law, whose house, it so happened, stood in the vast square one side of which was occupied by the palace of the Spanish Viceroy. It was the custom in Italy, as formerly amongst the Greeks, that whenever an artist had completed any great work, he should expose it in some street or thoroughfare, for the public to pass judgment on it. In compliance with this usage, Ribera's father-in-law placed in his balcony the 'Martyrdom of St Bartholomew' as soon as it was finished. The people flocked in crowds to see it, and testified their admiration by deafening shouts of applause. These acclamations reached the ears of the Viceroy, who imagined that a fresh revolt had broken out, and rushed in complete armour to the spot. There he beheld in the painting the cause of so much tumult. The Viceroy desired to see the man who had distinguished himself by so marvellous a production; and his interest in the painter was not lessened on discovering that he was, like himself, a Spaniard. He immediately attached Spagnoletto to his person, gave him an apartment in his palace, and proved a generous patron ever afterwards.

Lanfranco, the wealthy and munificent artist, on his way from the church Il Gesù, happened to observe an oil-painting hanging outside a picture-broker's shop. Lanfranco stopped his carriage, and desired the picture to be brought to him. Wiping the thick dust from the canvas, the delighted broker brought it, with many bows and apologies, to the great master, who on nearer inspection saw that his first glance had been correct. The picture was labelled 'Hagar and her Son Ishmael dying of Thirst,' and the subject was treated in a new and powerful manner. Lanfranco looked for the name of the painter, and detecting the word Salvatoriello modestly set in a corner of the picture, he gave instructions to his pupils to

buy up every work of Salvatoriello they could find in Naples. To this accident Salvator owed the sudden demand for his pictures, which changed his poverty and depression into comparative ease and satisfaction.

More than one famous singer might probably never have been heard of but for some discriminating patron chancing to hear a beautiful voice, perhaps exercised in the streets for the pence of the compassionate.—Some happy stage-hits have resulted from or originated in accidents. The odd hop skip and jump so effective in the delineation of Dunderbary, says an American interviewer of Mr Sothern, was brought about in this way. In the words of the actor: 'It was a mere accident. I have naturally an elastic disposition, and during a rehearsal one cold morning I was hopping at the back of the stage, when Miss Keene sarcastically inquired if I was going to introduce that into Dunderbary. The actors and actresses standing around laughed; and taking the cue, I replied: "Yes, Miss Keene; that's my view of the character." Having said this, I was bound to stick to it; and as I progressed with the rehearsal, I found that the whole company, including scene-shifters and property-men, were roaring with laughter at my infernal nonsense. When I saw that the public accepted the satire, I toned down what was a broad caricature to what can be seen at the present day by any one who has a quick sense of the absurd.'

An excellent landscape of Salvator Rosa's exhibited at the British Institution in 1823 came to be painted in a curious way. The painter happened one day to be amusing himself by tuning an old harpsichord; some one observed they were surprised he could take so much trouble with an instrument that was not worth a crown. 'I bet you I make it worth a thousand before I have done with it,' cried Rosa. The bet was taken; and Salvator painted on the harpsichord a landscape that not only sold for a thousand crowns, but was esteemed a first-rate painting.—Chemistry and pathology are indebted to what has often seemed the merest chance for many an important discovery. A French paper says it has been accidentally discovered that in cases of epileptic fits, a black silk handkerchief thrown over the afflicted persons will restore them immediately. Advances in science and art and sudden success in professions have often more to do with the romance of accident than most people imagine; but as we may have occasion again to take up the subject, we quit it for the present.

A DIFFICULT QUESTION.

THE STORY OF TWO CHRISTMAS EVES.

IN TWO CHAPTERS.

CHAPTER II.—ANSWERED.

THE mistletoe hung from the chandelier, the holly wreaths were on the walls, the clear fire shed a warm glow through the dimly lighted room, upon pictures and gilding, upon a great vase filled with crimson camellias, upon Ralph Lorraine's dark handsome face. Christmas eve again, his first year in England over. How little certainty there is in this world; when we think we have smoothed our path, and see our way straight before us, there

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risers up some roughness, some unevenness we have left unnoticed, or thought too small to trouble us. So with Ralph; he had answered the question he asked himself last Christmas eve by another; he was very happy, but he was thinking now as he leaned against the mantel-piece whether he could bear to leave the army and give up the life he had led for so long; the life, at times one of bold daring, at others of lazy pleasure, which had suited him so well; that even now, with the wish of his heart fulfilled, it cost him a struggle to bid farewell to it, and to settle down into a quiet country gentleman. He had kept his oath to his dead friend, the oath he had taken in answer to the faintly spoken words, 'I meant to have made her so happy.' Louise would remain in her old home as its mistress.

It had been a happy year to Ralph, and had glided away so quickly since that first night when he had seen her standing in the snowy churchyard, listening to words which sounded very much like love from another man's lips. That other had, however, confirmed his opinion. Vere Leveson had been away with his regiment during all the twelve months; not once had he met Louise; the field had been clear for Ralph. Yet it was only a week since he had spoken; he had not dared at first to break through the barrier of childish affection. She looked upon him as her guardian, her father's friend, with the same grateful reverence she might have given to that father had he lived; so he had tried very gently to awaken deeper feelings, through the sweet early spring-time and the glowing summer days, till when the leaves were lying in brown showers upon the sodden earth, she had grown silent, shy, and distant, and so cold that he thought all hope was gone. He went away in November; and when he returned, his love unspoken became torture to his upright nature; he could not bear to live there day-by-day, to see her so often, to let her kiss him as a daughter might have done, and all the while that hidden passion burning in his heart. But after his temporary absence she had changed again; she was more as she had been, gentle, playfully loving; and so one day he had spoken. He told her of her dying father's words; how his great wish had been that she should never feel the loss he had caused her; how her happiness was his first object in life; and how that life would be indeed worthless and barren, should he go back to it alone. Grateful, she answered as he wished, and Ralph held in his arms as his betrothed wife the child he had promised to watch over in the silence of the Indian dawn.

'But you must give me time,' she had said timidly. 'I have never thought of you but as my guardian, Ralph.' She dropped the name of her childhood then, as a tacit acknowledgment that those days were over, and that she would learn to love him henceforth, not with a child's grateful unquestioning love, but with the tenderness of a wife.

She was the only one surprised by the event; all the neighbourhood had known it long before; so had Mrs Lorraine and Emma; so had Katharine, whose wedding-day was now approaching, and whose bridegroom was Sir Michael Leyland. The drawing-room door opened, and Louise entered into the uncertain light, wearing the dress he had chosen for her—white bridal-looking silk, and holly wreaths like those she had worn last year.

She went up to him composedly, with none of a young fiancée's usual bashfulness.

'Do you like my dress, Ralph?' she said, looking up with her sweet dark eyes, as he bent down and touched the rosy lips.

'I do,' he answered. 'You are always lovely, darling; last year I thought the same, but then things were different. I did not dare to hope for such happiness as this.'

'Are you happy, Ralph?'

'Happier than I have ever been in my whole life,' he whispered.

Then the others came in, and they started for the annual ball at Leigh Park. Vere Leveson had returned a week ago; and as he stood among his father's guests there was a troubled look on his face which deepened ever as the white silk folds of the holly-wreathed dress brushed past him, or the dark eyes watching its wearer met hers. At last he went to her.

'Are you engaged for this, Miss Wrayworth?' he said abruptly.

'No,' she answered.

'Then you will give it to me?'

Once more he held her in his arms, once more her hand rested in his, as they glided slowly round the room. Vere did not speak till the waltz was ended, and then he led her to the same window where they had stood a year ago. The same stars were shining down on the same world, only that night there was no snow-shroud over the dead flowers, and the moon was half hidden by a great splash of cloud. The same first faint Christmas bells were sounding in the distance, mingled with the echoes of a carol sung by boys' clear voices, telling for the angels the old story they had told so long ago.

'I wish you a merry Christmas,' Vere said, looking down on her with a half-scornful smile. 'What mockery there is in that salutation sometimes. If you were to say it to me, for instance.'

'Indeed I hope you will have one,' she answered timidly.

'I must go a long way to find it then,' he muttered. 'But I beg your pardon, Miss Wrayworth; I must congratulate you. I met—your sister I was going to say—Miss Lorraine I mean, as I was on my way to call upon you the other day, and she told me of your engagement.'

'But you did not come,' said Louise.

'No; I thought you would be occupied. I congratulate you,' he repeated.

'Thank you,' she answered very low.

'Major Lorraine is completely calculated to make a wife happy, I should think,' said Vere, in the same cold scornful tone.

She lifted her head quickly. 'Indeed he is; he is the best, noblest, most generous man that breathes!'

'And you love him?'

'He has been everything to me all my life long, Mr Leveson—father, brother, friend. Would you not have me do what I can to prove my gratitude?'

'By making him a still nearer relation? Certainly. But for my part, there is one thing I should rather choose my wife to feel for me than gratitude. How everything changes in this world!' he added abruptly. 'Can it possibly be only one year since I stood at this same window with a girl by my side who promised to remember me and

trust me till next Christmas? Such a short time! only twelve little months. I suppose it is true that

Woman's love is writ in water,
Woman's faith is traced on sand.

But I never believed it!

'I hope you will not find it so,' said the girl softly, as she played nervously with the shining holly leaves, breaking them, and crushing the scarlet berries till they fell spoiled upon the floor. 'I must congratulate you.'

'I beg your pardon! Congratulate me! What upon?'

'Your—your engagement.'

'My engagement! And may I ask to whom?'

'To Miss Leslie.'

'What!' he exclaimed. 'What do you mean? Alice Leslie! Who can have told you such a falsehood?'

'Katharine heard it when she was in London.' There was a long, long silence, while each guessed the other's secret.

'Is it not true?' she said at last.

'No; on my soul!' he answered. 'I never said a word to that girl all the world might not have heard. I engaged to her! No! O Louise! he cried passionately; 'Louise, my darling! I have loved you so long, and this is the end of it! Did not you know last year that I loved you and you only, when I asked you to trust me? I have been silent for a year, to obey my father, and—I have lost you!'

His voice trembled as he caught her hands, and a great longing tenderness gleamed in his deep blue eyes. 'Did not you love me, Louise? Have I been fool enough to delude myself all these months?'

'I was very—very unhappy when Katharine told me.' The answer was simply, hopelessly spoken, and there was another silence, broken again by her voice. 'Vere,' she said, 'Vere—I may call you so just this once—we have made a terrible mistake; but I must keep my word. Say good-bye to me, and let me go.'

'Oh, my darling! my darling!'

'Hush! Vere, hush!' she said brokenly. 'I owe him a debt nothing can ever pay; and I know he will keep the promise he made to my father years ago, to try and make me happy.'

'God helping me, I will!' It was Ralph Lorraine's voice that spoke; Ralph Lorraine's dark fearless eyes that rested upon her; Ralph Lorraine's loyal hand which took her cold one, as she started back from the man she loved.

'Don't look frightened, dear,' he said gently. 'Poor child, how you must have suffered! Louise! do you think I would let you bear one moment's pain to save myself from a lifetime of misery? Forgive me, dear; the dream has been very bright, and the awaking is—he paused for a moment and steadied his voice—'a little hard; but I shall soon be used to it. The vow I made to your dead father, I will still keep, Louise; I am your guardian, nothing more. Forget what has been between us, child, as soon as you can.' He turned, and held out his hand to Vere. 'It is a precious charge I give up to you,' he said solemnly; 'you must help me to keep my vow.' He paused, then added tremulously: 'You must make her happy for me.' Then without another word he passed out through

the open window into the wintry moonlit garden, and left them alone.

He wandered down the avenue through the open gate among the waiting carriages on to the silent fields, bearing the sorrow bravely, the utter wreck of his life's sweetest hopes. 'Which is the harder,' he thought bitterly as he hurried on, scarcely knowing where he went, 'to lay down life or love?' In his great unselfishness he never blamed her who had wrought this trouble; he had vowed to make her happy; he had done his duty, nothing more, but it was hard to do. It had been a fearful temptation as he listened, to go away without speaking, and so keep her his; but he had conquered. Yet it seemed as though he could not live without her, as though that one happy week had swallowed up his whole existence, as though he had loved all his life instead of for one short year; and he looked up piteously to the cloudy heavens, to the wintry moon, seeking for the comfort that was not to be found, longing, in his wretchedness, to lie down upon the cold wet grass and sleep never to wake again.

'Won't you remember the carols?'

A shrill voice broke in upon his thoughts; he started, looking down suddenly, vacantly, as though he did not comprehend.

Two boys stood there, on their way home across the fields. 'Hush!' said the elder; 'don't you see it's the Major? Merry Christmas, sir!'

Ah! how mockingly those words sounded now. The greeting stung him as the taunt of a fiend; he turned and hurried on. He paused breathlessly on the stile leading into the next field; all his strength seemed to have left him as he stood there alone with his grief. Then from the distance was wafted to him the sound of the boys' voices, and the words they sung were these:

All glory be to God on high,
And to the earth be peace;
Good-will henceforth from heaven to man
Begin and never cease!

Somehow they comforted him as no human sympathy could have done—the grand old words, the simple tune, the children's voices. Though he did not know that by what he had done that night, he had fulfilled as far as might be the charge given in the angels' song.

A DREAM AND ITS CONSEQUENCES.

WHEN I was about twelve years of age I was invited by Mrs Hall, my god-mother, to pay her a visit before going to a boarding-school, where I was to remain for a few years. My mother had died when I was very young; and my father thought it better for me to be at a nice school, where I would be amongst girls of my own age, than in the house with only his sister and himself. Mrs Hall was very fond of me; she had no children of her own; and had my father consented, she and Mr Hall would have taken me to live with them entirely.

It was a lovely day in June when I arrived at my god-mother's; and she was delighted to see me. The house was beautifully situated on high ground, surrounded by grand old trees, and at one side was a flower-garden.

One morning god-mother said to me: 'Come upstairs with me, Lillian, and I will shew you some

Indian jewels that my uncle left me lately.' She opened the drawer of an inlaid sandal-wood cabinet and took out a small case, in which were a pair of ear-rings, a brooch, and necklace of most beautiful diamonds. I thought I had never seen anything so beautiful before. 'My dear Lillian,' said she, 'I intend to give you these on your sixteenth birthday. I see, however, there is a stone loose in one of the ear-rings, so I will take it into town to-day and have it repaired.' She folded it up carefully and put it in her purse; the case with the other diamonds she put in one of the drawers of her dressing-glass.

After lunch, Mr and Mrs Hall took me with them to the town, which was about four miles distant. The ear-ring was left at the jeweller's, and as we were to spend the day at a friend's house, we arranged to call for it on our way back. But you will say what has all this to do with your dream? Well, wait a little and you will see.

We spent a pleasant day, called for the ear-ring on our way, and arrived home about half-past nine o'clock. As I was taking off my bonnet, god-mother came into the room. 'Lilian,' said she, 'I cannot find the case of diamonds anywhere. Did I not leave it in the drawer in my dressing-glass, before I went out? I went to put in the other ear-ring now, and it was not there. Who can have taken it?'

'You certainly left it in the dressing-glass drawer,' I said. 'Could any of the servants have taken it, do you think?'

'I am sure they would not,' she answered. 'I have had them with me for years, and never missed anything before.'

'Are there any strangers about that could have come in through the window?'

'No, Lillian; there are no strangers about the place except the gardener, and he seems a most respectable man. I got a very high character of him from his last place; in fact we were told he was a most trustworthy person.'

Next day there was a wonderful commotion about the missing jewel-case. The police were sent for, and every place was searched over and over again, but to no purpose. One thing, however, puzzled us: on the window-sill was a foot-mark, and near the dressing-table a little bit of earth, as if off a shoe or boot; which led us to think that the thief must have come in through the window. But how did he get up to it? It was a good height from the ground, and the creeping plants were not in the least broken, as would have been the case had any one climbed up by them. A ladder must have been employed; and it was little to the credit of the police that this fact had not been properly considered. As the matter stood, it was a mystery, and seemed likely to remain so, and only one ear-ring was left of the valuable set.

In a few days I left for school, where I remained for four years. I spent every vacation between my home and my god-mother's. We often spoke of the stolen diamonds; but nothing had ever been heard of them, though a reward of fifty pounds had been offered by Mr Hall for any information that would lead to the detection of the thief. On my sixteenth birthday my god-mother gave me a beautiful watch and chain and the diamond ear-ring, which she had got arranged as a necklace.

'I am so sorry, Lillian,' said she, 'that I have

not the rest of those diamonds to give you; but if ever they are found, they shall be yours, my dear.'

I must now pass over six years, which went by quietly and happily, nothing very important taking place until the last year, during which time I had been married. My husband was a barrister. We lived in the north of England. My mother-in-law, Mrs Benson, and Mary, one of her daughters, lived some miles away from us near the sea-coast. It was a very lonely place, a long way from the little fishing-town, or rather village, of Burnley. I confess I often felt very nervous about Mrs Benson and her daughter living alone (her husband being dead many years). Except three women-servants in the house, and the coachman and his family who lived in the lodge, there was no one nearer than Burnley, four miles off. Besides, it was known that there was a large quantity of plate in the house; and the little sea-side village was often the resort of smugglers and other wild and lawless characters. One day, while thinking of them, I felt so uneasy that I said to my husband: 'I hope, Henry, there is nothing wrong with your mother; she has been in my mind all day.'

'Oh,' said he, 'why should you feel anxious about her to-day? I saw her last Tuesday; and if she were ill, Mary would be sure to let us know. It is only one of your "fancies," little wife.'

Still I did not feel easy, for more than once before my so-called 'fancy' had proved to be a 'reality'; so I determined that in a few days I would go and see Mrs Benson. All that evening I could not get her out of my thoughts, and it was a long time before I went to sleep. I think it must have been about three o'clock in the morning that I woke in a state of terror. I had dreamed that I saw Mrs Benson standing in the window of her bedroom, beckoning me to come to her, and pointing to a female figure who was stealing along under the shade of the trees in the avenue, for the moon was shining brightly.

I started up, thinking I heard her calling me. And here is the most extraordinary part of it all—though I was now quite awake, I heard, as I thought, a voice saying to me: 'Go, tell Mrs Benson, Martha is deceiving her; tell her to send her away at once.'

Three times these words seemed to be repeated in my ear. I can't describe exactly what the voice was like: it was not loud, but quite distinct; and I felt as I listened that it was a warning, and that I *must* obey it. I woke my husband, and told him my dream and the words I had heard. He tried to calm my mind, and evidently thought me foolish to be so frightened by only a stupid dream. I said I would drive over the first thing after breakfast, and see if anything was wrong with Mary or her mother. The only thing that puzzled me was that Martha should be mentioned as deceiving Mrs Benson. She acted as housekeeper and lady's-maid to her, and was believed to be most trustworthy in every way. She had been four years with her; and was much respected. She was a silent reserved kind of person, about thirty-five years of age. One thing I had often remarked about her was, that when speaking to any one she never looked straight at them; but I thought it might be from a kind of shyness more than anything else.

As soon as breakfast was over I set off, telling my husband I would very likely not return until

next day; and if possible, he was to come for me. He could drive over early and spend the day; and we would return home together in the evening, if all was well with his mother.

When I arrived I found Mrs Benson and Mary looking as well as ever, and everything seemingly just as usual. Martha was sitting at work in her little room, which opened off Mrs Benson's dressing-room. I could not help looking at her more closely than I would have done at another time, and I thought I saw a look of displeasure cross her face at seeing me. Mary and her mother were of course delighted to see me, and asked why Henry did not come too. So I told them I would stay till the next day, if they would have me, and Henry would come for me then. They were quite pleased at that arrangement; for it was not very often my husband could spend a whole day with them.

As the day passed on and nothing out of the way happened, I began to think I had frightened myself needlessly, and that my dream or vision might have been the result of an over-anxious mind. And then Martha, what about her? Altogether I was perplexed. I did not know what to think; but I still felt a certain undefined uneasiness. I offered up a silent prayer to be directed to do right, and determined to wait patiently and do nothing for a while. I almost hoped I might hear the voice again, giving me definite instructions how to act. Lunch passed and dinner also; and the evening being very warm, for it was the middle of July, we sat at the open window enjoying the cooling breeze that set in from the sea.

As they were early people, shortly after ten o'clock we said 'good-night,' and went up to our bedrooms. My room looked on the avenue, some parts of which were in deep shade, while in other parts the moonlight shone brightly through breaks in the trees. I did not feel in the least sleepy; and putting out my candle, I sat by the window, looking at the lovely view; for I could see the coast quite plainly, and the distant sea glistened like silver in the moonlight. I did not think how long I had been sitting there, until I heard the hall clock strike twelve. Just then I heard, as I thought, a footstep outside my door, which evidently stopped there, and then in a few seconds passed on. I did not mind, thinking it might be one of the servants, who had been up later than usual, and was now going quietly to bed. I began to undress, not lighting the candle again, as I had light enough from the moon. As I came towards the window to close it, I saw, exactly as in my dream, a female figure—evidently keeping in the shade of the trees—going down the avenue. I determined to follow and see who it was, for I now felt the warning voice was not sent to me for nothing, and I seemed to get courage, girl though I was, to fathom the mystery. I hastily dressed, threw a dark shawl over my head, and going noiselessly down-stairs, opened the glass door in the drawing-room window, and left it so that I could come in again. I kept in the shade of the trees as much as possible, and quickly followed the path I had seen the woman take. Presently I heard voices; one was a man's, the other a woman's. But who was she? I came close, and got behind a large group of thick shrubs. I could now see and hear them quite well; they were

standing in the light; I was in deep shade. Just then the woman turned her head towards me. It was *Martha*! What did she want there at that hour? And who was this man? I was puzzled. Where had I seen that face before? for that I *had* seen it before, I was certain; but where, and when, I could not remember. He was speaking in a low voice, and I did not hear very distinctly what he said, but the last few words were: 'And why not to-night? Delays are always dangerous, especially now, as they are beginning to suspect me.'

'Because Mrs Benson's daughter-in-law is here, and she is sleeping in the room over the plate-closet, and would be sure to hear the least noise. Wait until to-morrow night; she will be gone then. But indeed John, I don't like this business at all. I think we'd better give it up. No luck will come of it, I am sure.'

'Look here, Martha,' said the man. 'I have a chance of getting safe off now. I have it all settled, if you will only help me to get this old woman's plate. With that and a few little trinkets I happened to pick up a few years ago, you and I may set up in business over in America. The other fellows will help me. Meet me here to-morrow night, to let me know that all is safe for us. See here. I have brought you a valuable present. Keep it until the plate is secure with me; for you must stay here until all blows over; then make some excuse for leaving, and come over and join me in New York. If you want money, sell these diamonds in Liverpool; they are worth no end of money.'

I could see quite well that he took something out of his pocket and gave it to her. She held it up to look at it; and there, glistening in bright moonlight, I saw—my god-mother's diamond ear-ring! the one that had been stolen over nine years ago with the other jewels from her room.

Here then at last was the mystery solved, everything made clear, and all through my dream! Presently the light fell on the man's face again, and I instantly recognised my god-mother's very respectable gardener. A decent man he was believed to be, but a thief all the time, and one who hid his evil deeds under a cloak of religion. And who was this woman he seemed to have got such power over? Evidently his wife; for I gathered that from his conversation with her. I waited where I was until they were both gone—Martha back to the house, and her husband to the village; then as quietly as I could I returned to the house and reached my room. Falling on my knees I gave thanks to God for making me the means of finding out such a wicked plot, and perhaps saving the lives of more than one under that roof; for it is more than likely that had those desperate men been disturbed in their midnight plunder, they would not have hesitated at any deed which would enable them to carry out their wicked plans.

I slept little that night, and next morning tried to appear calm and composed, though I was frightened and really ill. I was longing for my husband to come, that I might tell him all, and consult what was best to be done, to prevent robbery and perhaps bloodshed. At last, to my great relief, I saw him coming. I ran to the gate to meet him, and told him what I had seen and

heard the night before. 'Now,' I said, 'will you ever laugh at my "fancies" again?'

'No, my dear little wife,' said he; 'I never will.'

We then arranged that we should tell his mother and sister everything; and he was to go to the nearest police station and arrange with the chief officer to have a number of men ready in the wood near the house at twelve o'clock that night; that after dinner we were to say 'good-bye' to Mrs Benson, and drive home; but would return and join the police in the wood, and wait there until we saw Martha leave the house to meet her husband. We were then to go in and wait until the thieves came in, when they were to be surrounded and taken prisoners. My husband wanted me to remain at our own house; but I would not do so, as I said I would only be imagining all sorts of dreadful things; besides, I knew his mother and Mary would like to have me with them.

It all turned out as well as could be. The night was very fine; and just at twelve o'clock Martha stole down to the place where I had seen her the night before; then we all, about a dozen policemen and ourselves, went into the house. The men were stationed out of sight in different rooms, waiting for the robbers' entrance. Henry came up to Mrs Benson's room, where all of us women were, including the two servants. With breathless anxiety we watched and waited. From where I stood I could see the way they would come.

It was about two o'clock when I saw Martha coming up the walk and four men with her. 'Look!' I said; 'there they are.' They went round to the back door, and we heard them stealing along the passage in the direction of the plate-closet. Then a sudden rush—a scream from the wretched Martha—imprecations loud and bitter—a shot!—another scream!

'May God grant no lives will be lost!' we prayed.

Poor Mary nearly fainted. At last we heard the officer call Henry to come down. The four men were well secured and taken to the police station. Martha was taken there too. She confessed she had let them in for the purpose of stealing the silver. One of the robbers was slightly wounded in the arm, but no one else was hurt. Very thankful was I when I found next day that none was the worse for having gone through such a terrible scene.

The house where Martha's husband lodged was searched, and the case of diamonds and many other valuable articles found there. This immensely respectable gardener had been a disgrace to his family and his profession. Left very much to himself through the indulgence of his employer, he had contracted habits of tippling with low associates at the neighbouring village, and become so completely demoralised, as at length to assume the degraded character of a burglar. Now came the retribution which attends on wrong-doing. The thieves were all tried at the next assizes, and sentenced to various terms of imprisonment.

It is now many years since all this happened; but I can never forget what I went through those two dreadful nights; though I remember with thankfulness, that through my dream and the warning voice I heard, I was the means of averting a great wrong, and perhaps murder. I do not

impute anything supernatural to my dream. It may have merely been the result of tension of feelings, supported by some coincidences. At all events, the results were such as I have described.

ODD NOTES FROM QUEENSLAND.

QUEENSLAND, as is pretty generally known, is the latest planted British colony in Australia, and has already made a surprising degree of progress. Situated on the coast of the Pacific, to the north of New South Wales, its more settled parts enjoy a delightful climate, which is said to resemble that of Madeira. It is usually thought that nowhere in the world do new and small towns develop so speedily into populous cities as in the United States; but in this respect Queensland can shew results nearly as remarkable. In Brisbane, the capital of the colony, one finds immense enterprise, with all the tokens of civilisation on the English model. A correspondent favours us with the following notes suggested by the *Queenslander*, which we presume to be the leading newspaper in the colony.

A cursory glance down the advertising columns of the *Queenslander* gives one no mean notion of the colony's capacities. One auctioneer announces for sale three thousand square miles of land, twenty-one thousand head of cattle, and a hundred and twenty-four thousand sheep. A dairy herd of six hundred head is in the market here, and there a stock-owner announces he has seven hundred pure merino rams to dispose of. Sugar-plantations, salt-works, gold mines, are on offer; and—incontrovertible proof of the land's capabilities—nurserymen are ready to supply all comers with seeds or roots of all the favourite flowers known in England, of every kind of grass and grain and vegetable familiar to the British farmer and market-gardener; and keep in stock thoroughly acclimatised apples, pears, plums, cherries, peaches, apricots, nectarines, quinces, mulberries, walnuts, chestnuts, coconuts, grapes, figs, limes, lemons, oranges, dates, guavas, and mangoes, in every approved variety.

One correspondent extols the merits of chicory as a profitable thing to grow; another relates his successful attempts at rice-raising; and a third waxes eloquent about the unique garden of Mr Barnes of Mackay, with its groves and avenues of cocoa-nut trees; its hundreds of fine date-trees; its grapes, oranges, apples, and fruits of all climes and seasons, thriving together; its enormous melons and magnificent pines ripening and rotting around. The owner looks forward to reaping a large profit from his twelve hundred cocoa-nut trees, many of them now thirty feet high, although as yet the return for his ten years' labour and expenditure has been something not worth mentioning.

Then we have an account of 'the acclimated wonders of the vegetable kingdom blooming in this present February 1877, in the government Botanic Gardens of Brisbane;' said gardens being

then in the height of their midsummer glory, and a perfect blaze of colour. 'One of the most strikingly handsome as well as curious trees in the gardens is the *Kilgeria pinnata*, from India. Its branches bear a kind of drooping flexible vine-rope or liana stem, each of which terminates in a large spike of flowers; while at various parts of the said rope pendants, hang huge seed-pods, like in shape unto the weights of an extra large cuckoo-clock.' Several varieties of the mango just now are in fine bearing, and the wine-palm of the West African coast was never more juicy and strawberry-like in flavour. Ferns and palms are magnificent, but after all, the Queenslanders find a native plant excite his admiration most. 'No description can do justice to the exquisite colour of the so-called blue water-lily of this colony. It is not blue, nor white, nor mauve, nor lilac, but has a blended dash of all of them, and is lovelier than any. A Swiss or French dyer who could reproduce it faithfully would make his fortune. It is a colour suggestive of summer afternoons, of lawns, of croquet, of classic villas, swell society, and five o'clock teas in the garden, with greyhounds, spaniels, pretty girls, and rosy children grouped about miscellaneous like.'

Acclimatisation has succeeded too thoroughly in one instance—the rabbit, as we have had occasion to shew in a previous paper, having increased and multiplied until the colonists have reason to wish he had never been induced to settle in the land. One wheat-grower, wroth at having to sit up 'o' nights with his farm hands, dogs, bullock-bells, and tin cans, in order to scare the little pests back to their burrows, lest, like his neighbours, he should have nothing left to reap, declares either the rabbit or the farmer must go down; there is no longer room for both. Sheep-farmers are in a similar predicament; but their trouble is of native growth; the kangaroo is their *bête noire*, and they are busy arming against the pounced depredators. Kangaroo battues are the rage. At one held at Warroo, upwards of three thousand five hundred of these animals were disposed of in ten days; making eight thousand of which the run had been cleared in the space of a month—equivalent to saving pasturage for a like number of sheep. Another sheep-owner, after shooting down four thousand kangaroos on a small portion of his run, finds it necessary to call in outside aid, and lay in tons of cartridges for the use of those who respond to the appeal. By reports just to hand (Oct. 1877) we find that the process of kangaroo extermination is still at work.

There are other nuisances it would be well to see to. A woodman at Maryborough lately died of a scorpion sting; and we read of a man being bitten by a black snake while working a short distance from Brisbane. His mates scarified the wound, bound up the arm, and administered a large dose of brandy; put the patient into a cart, and made for a dispensary with all possible speed. Here the wound was scarified again; and a doctor

passing by, being called in, cauterised it, and injected ammonia. In a few minutes the man's spasmodic struggles ceased, and he was able to walk to a cab. By the time he reached the hospital all traces of the venom had disappeared, and he seemed only to suffer from the effects of the spirits he had imbibed. The ammonia treatment of snake-bite is not efficacious with the lower animals; at least in a series of experiments upon dogs, not a single canine sufferer recovered. Although Queensland is reputed to be a land of rivers and streams, there are tracts where water is scarce, and those who recklessly go on the tramp, or 'wallaby,' as this kind of vagabonding is called, sometimes experience the horrors of thirst, and actually sink down and die in the wilderness.

To prove the truth of this, and to shew that examples are not wanting of travellers who have died of thirst, a correspondent of the *Queenslander* tells how, following the tracks of some horses that had strayed from their beat, he came upon a pair of moleskin trousers hanging upon a tree, as if put there for a signal of distress. Looking about, he picked up a torn pocket, containing an illegible cheque and a match-box; and scattered about on the grass saw a blanket, shirt, hat, and water-bag. Searching further, he found the skull and bones of a man who had apparently been dead some two or three weeks; some of the flesh was still on the bones, and the brains were almost intact. Bags of flour, tea, and sugar lay near; a proof that the poor fellow had not died of hunger, but of thirst, the nearest water being twelve miles from the spot where he died his lonely death.

Thomas Stevenson, a lad of seventeen, started one December morning from his brother's station, some fifty miles from Louth, New South Wales, for the post-office at that place, which he reached safely, and left again at daybreak on the Saturday. The following Wednesday his horse arrived home, bearing his rider's coat, scarf, and spurs. His brother started for the bush with some black trackers, who found that the missing lad had been wandering on the Debil-Debil Mountains, but finding it impossible to get his horse down them, had turned back to get round the base of the mountains, but mistaking the road and overtaken by darkness, had camped out and hobbled his horse. After a three days' search the trackers discovered the body of young Stevenson lying between two logs in a lonely part of the bush. The weather had been extremely hot, and it was known he had no water-bag with him; so there was little doubt that he died of thirst. After losing his way and losing hope, he must have taken off his coat, scarf, and spurs, fastened them to a saddle, and turned the horse loose. Then placing the two logs on a track, he had lain down between them with his head resting on a cross-piece at one end, and so waited Death's releasing hand.

If advertising means business, business should be brisk indeed at Darling Downs, since the editor of the *Darling Downs Gazette* finds it necessary to explain the absence of the customary 'leader' in this wise: 'Owing to a press of adverts— In fact it is coming to this, that we shall have to throw up the business if people come hustling and advertising in at the rate they are at general appreciation of the fact tl

is bound to be read by everybody, is becoming overwhelming. We plead guilty to no leader this time; but what were we to do? Only just now a bald-headed man came rushing in— But stop! let us first explain that we mean no offence to bald-headed men, and they needn't get up in arms. Goodness knows, we were bald-headed enough ourselves once upon a time, and used to be up in arms frequently about that period. Ask our nurse. However, as we were about to say, a bald-headed man came hustling in just as we had commenced our leader, and had got as far as, "When the history of mankind shall have been disinterred from the triturated and inevaporable sediments of its consummated cosmogony"—and while with our pen suspended we were working up the continuation in the same gay and sparkling style, that bald-headed man violently brought us down from the ethereal heights in which we were soaring, and wanted to know whether we could spare space for a column or so of advertisements. He fluttered some dingy papers, each marked five pounds, under our eyes, and we rather liked it. But we conquered our feelings and remarked: "Caitiff! our duty to our readers demands a leading article; hang advertisements! Take your beak from out our heart; take your form from off our door." The wretch winked, and went to the book-keeper, and inveigled him into finding space for that advertisement. Since then, there have been processions of bald and hairy men with insidious manners and fluttering notes, palming off advertisements on us. In short—or if the reader objects to that phrase as inappropriate—at length, we have no leading article, and if the reader could only witness our tears!

With certain parliamentary proceedings fresh in remembrance, we dare not cast stones at our cousins for not eliminating the rowdy element from their legislatures. That it should be predominant is not surprising, since we are assured, that in view of a coming dissolution, candidates swarm on the ground like frogs in a marsh. Every man who has figured in the insolvent list for the last three years; every boot-black whose stock of materials has given out; wild wood-carters whose only horse and hope is dead; country newspaper reporters down on their luck; country-town bellmen whose vocation has been supplanted; seedy men who cry penny papers in the streets; in short, all Bohemia and its dependencies have taken the field with a view to winning senatorial honours and the three hundred a year going with them. Prominent among these candidates stand Tom McInerney, who bases his claims upon the fact that he owns fifteen drays and fourteen children, and is under the impression that S. V. after a man's name denote him to be a civil engineer; and Patrick Tyrrell, who objects to 'circular' education, and who proved himself a real Irishman when asked if he would tax absentees, by replying: "To be sure I would, if they didn't live in the country."

However Australian legislators may indulge in libellous personalities, it is pleasant to note that such things are not received into favour by the press; the *Queenslander* notifying to all concerned, that "any statement, comment, or criticism of a personal character calculated to provoke ill-feeling in the community from which it may be penned, will not only be rigorously excluded, as hitherto,

but any correspondent who may think fit to forward such matter for publication will be immediately requested to discontinue his connection with this journal." To be perfect, this notification only needs the N.B.—English papers please copy.

TAKING IT COOLLY.

SOME of many instances of extraordinary coolness in the midst of danger and otherwise that have been recorded, are here offered to our readers, together with some amusing sayings and doings. When gallant Ponsonby lay grievously wounded on the field of Waterloo, he forgot his own desperate plight while watching an encounter between a couple of French lancers and one of his own men, cut off from his troop. As the Frenchmen came down upon Murphy, he, using his sword as if it were a shillelagh, knocked their lances alternately aside again and again. Then suddenly setting spurs to his horse, he galloped off full speed, his eager foes following in hot pursuit, but not quite neck and neck. Wheeling round at exactly the right moment, the Irishman, rushing at the foremost fellow, parried his lance, and struck him down. The second, pressing on to avenge his comrade, was cut through diagonally by Murphy's sword, falling to the earth without a cry or a groan; while the victor, scarcely glancing at his handiwork, trotted off whistling *The Grinder*.

Ponsonby's brave cavalry-man knew how to take things coolly, which, according to Colonel R. P. Anderson, is the special virtue of the British man-of-war, who, having the utmost reliance in himself and his commanders, is neither easily over-excited nor readily alarmed. In support of his assertion, the colonel relates how two tars, strolling up from the Dil-Kusha Park, where Lord Clyde's army was stationed, towards the Residency position at Lucknow, directed their steps by the pickets of horse and foot. Suddenly, a twenty-four-pound shot struck the road just in front of them. 'I'm blessed, Bill,' said one of the tars, 'if this here channel is properly buoyed!' and on the happy-go-lucky pair went towards the Residency, as calmly as if they had been on Portsmouth Harb. During the same siege, a very young private of the 102d was on sentry, when an eight-inch shell, fired from a gun a hundred yards off, burst close to him, making a deal of noise and throwing up an immense quantity of earth. Colonel Anderson rushed to the spot. The youthful soldier was standing quietly at his post, close to where the shell had just exploded. Being asked what had happened, he replied unconcernedly: 'I think a shell has busted, sir.'

Towards the close of the fight of Inkermann, Lord Raglan, returning from taking leave of General Strangways, met a sergeant carrying water for the wounded. The sergeant drew himself up to salute, when a round-shot came bounding over the hill, and knocked his forage-cap out of his hand. The man picked it up, dusted it on

his knee, placed it carefully on his head, and made the salute, not a muscle of his countenance moving the while. 'A neat thing that, my man?' said Lord Raglan. 'Yes, my lord,' returned the sergeant, with another salute; 'but a miss is as good as a mile.' The commander was probably not surprised by such an exhibition of *sang-froid*, being himself good that way. He was badly hurt at Waterloo; and, says the Prince of Orange, who was in the hospital, 'I was not conscious of the presence of Lord Fitzroy Somerset until I heard him call out in his ordinary tone: "Hollo! Don't carry that arm away till I have taken off my ring!" Neither would nor operation had extorted a groan from his lips.'

The Indian prides himself upon taking good or ill in the quietest of ways; and from a tale told in Mr Marshall's *Canadian Dominion*, his civilised half-brother would seem to be equally unemotional. Thanks mainly to a certain Métis or half-breed in the service of the Hudson Bay Company, a Sioux warrior was found guilty of stealing a horse, and condemned to pay the animal's value by instalments, at one of the Company's forts. On paying the last instalment, he received his quittance from the man who had brought him to justice, and left the office. A few moments later the Sioux returned, advanced on his noiseless mocassins within a pace of the writing-table, and levelled his musket full at the half-breed's head. Just as the trigger was pulled, the Métis raised the hand with which he was writing and touched lightly the muzzle of the gun; the shot passed over his head, but his hair was singed off in a broad mass. The smoke clearing away, the Indian was amazed to see his enemy still lived. The other looked him full in the eyes for an instant, and quietly resumed his writing. The Indian silently departed unpursued; those who would have given chase being stopped by the half-breed with: 'Go back to your dinner, and leave the affair to me.'

When evening came, a few whites, curious to see how the matter would end, accompanied the Métis to the Sioux encampment. At a certain distance he bade them wait, and advanced alone to the Indian tents. Before one of these sat crouched the baffled savage, singing his own death-hymn to the tom-tom. He complained that he must now say good-bye to wife and child, to the sunlight, to his gun and the chase. He told his friends in the spirit-land to expect him that night, when he would bring them all the news of their tribe. He swung his body backwards and forwards as he chanted his strange song, but never once looked up—not even when his foe spurned him with his foot. He only sang on, and awaited his fate. Then the half-breed bent his head and spat down on the crouching Sioux, and turned leisurely away—a crueler revenge than if he had shot him dead.

It is not given to every one to play the philosopher, and accept fortune's buffets and favours with equal placidity. Horatius are scarce. But there

are plenty of people capable of behaving like Spartans where the trouble does not touch their individuality. 'How can I get out of this?' asked an Englishman, up to his armpits in a Scotch bog, of a passer-by. 'I dinna think ye can get out of it,' was the response of the Highlander as he went on his way.

Mistress of herself was the spouse of the old gentleman, who contrived to tumble off the ferry-boat into the Mississippi, and was encouraged to struggle for dear life by his better-half shouting: 'There, Samuel, didn't I tell you so? Now then, work your legs, flap your arms, hold your breath, and repeat the Lord's Prayer—for its mighty onsertin, Samuel, whether you land in Vicksburg or eternity!'

Thoroughly oblivious of court manners was the red-cloaked old Kentish dame who found her way into the tent occupied by Queen Charlotte, at a Volunteer review held shortly after her coming to England, and after staring at the royal lady with her arms akimbo, observed: 'Well, she's not so ugly as they told me she was!'—a compliment the astonished queen gratefully accepted, saying: 'Well, my good woman, I am very glad of dat.' Probably Her Majesty forgave her critic's rudeness as the outcome of rustic ignorance and simplicity.

There is no cooler man than your simple fellow. While General Thomas was inspecting the fortifications of Chattanooga with General Garfield, they heard some one shout: 'Hello, mister! You, I want to speak to you!' General Thomas, turning, found he was the 'mister' so politely hailed by an East Tennessee soldier.

'Well, my man,' said he, 'what do you want with me?'

'I want to get a furlough, mister, that's what I want,' was the reply.

'Why do you want a furlough, my man?' inquired the general.

'Wall, I want to go home and see my wife.'

'How long is it since you saw her?'

'Ever since I enlisted; nigh on to three months.'

'Three months!' exclaimed the commander.

'Why, my good fellow, I have not seen my wife for three years!'

The Tennessean looked incredulous, and drawled out: 'Wall, you see, me and my wife ain't that sort!'

The Postmaster-general of the United States once received an odd official communication; the Raeborn postmaster, new to his duties, writing to his superior officer: 'Seeing by the regulations that I am required to send you a letter of advice, I must plead in excuse that I have been postmaster but a short time; but I will say, if your office pays no better than mine, I advise you to give it up.' To this day, that Postmaster-general has not decided whether his subordinate was an ignoramus or was quietly poking fun at him.

Spite of the old axiom about self-praise, many are of opinion that the world is apt to take a man at his own valuation. If that be true, there is a church dignitary in embryo somewhere in the young deacon, whose examining bishop felt it requisite to send for the clergyman recommending him for ordination, in order to tell him to keep that young man in check; adding by way of

explanation: 'I had the greatest difficulty, sir, to prevent him examining me!' This not to be abashed candidate for clerical honours promises to be as worthy of the cloth as the American minister who treated his village congregation to one of Mr Beecher's sermons, unaware that the popular Brooklyn preacher made one of his hearers. Accosting him after service, Mr Beecher said: 'That was a fair discourse; how long did it take you to write it?'

'Oh, I tossed it off one evening,' was the reply.

'Indeed!' said Mr Beecher. 'Well, it took me much longer than that to think out the framework of that sermon.'

'Are you Henry Ward Beecher?' asked the sermon-stealer.

'I am,' said that gentleman.

'Well, then,' said the other, not in the least disconcerted, 'all I have to say is, that I ain't ashamed to preach one of your sermons anywhere.'

We do not know if Colman invented the phrase, 'As cool as a cucumber'; but he makes the Irishman in *The Hair-at-Law* say: 'These two must be a rich man that won't lend, and a borrower; for one is trotting about in great distress, and t' other stands cool as a cucumber.' Of the two, the latter was more likely to have been intending a ridd on another man's purse, for the men whose 'very trade is borrowing' are usually, we might say necessarily, the coolest of the cool; like Bubb Dodginton's impecunious acquaintance, who, rushing across Bond Street, greeted Dodginton with: 'I'm delighted to see you, for I am wonderfully in want of a guinea.'

Taking out his purse, Bubb showed that it held but half a guinea.

'A thousand thanks!' cried his tormentor, deftly seizing the coin: 'that will do very well for the present;' and then changed the conversation. But as he turned to take leave, he inquired: 'By-the-by, when will you pay me that half-guinea?'

'Pay you? What do you mean?' exclaimed Dodginton.

'Mean? Why, I intended to borrow a guinea of you. I have only got half; but I'm not in a hurry for t' other. Name your own time, only pray keep it!' saying which, he disappeared round the corner.

'John Phonix' the American humorist being one night at a theatre, fancied he saw a friend some three seats in front of him. Turning to his next neighbour he said: 'Would you be kind enough to touch that gentleman with your stick?' 'Certainly,' was the reply, and the thing was done; but when the individual thus assaulted turned round, Phonix saw he was not the man he took him for, and became at once absorbed in the play, leaving his friend with the stick to settle matters with the gentleman in front, which, as he had no excuse handy, was not done without considerable trouble. When the hubbub was over, the victim said: 'Didn't you tell me to tap that man with my stick?' 'Yes.' 'And what did you want?' 'Oh,' said Phonix, with imperturbable gravity, 'I wanted to see whether you *would* tap him or not!'

'Jack Holmes,' a man-about-town, living no one knew how, was once under cross-examination by a certain sergeant-at-law, who 'knew his man too well. 'Now, sir,' said the learned gentleman, 'tell the jury how you live?'

'Well,' said Holmes, 'a chop or a steak, and on Sunday perhaps a little bit of fish; I am a very plain-living man.'

'You know what I mean, sir,' thundered the questioner. 'What do you do for a living?'

'The same as you, sergeant,' said the witness, tapping his forehead suggestively; 'and when that fails, I do'—going through the pantomime of writing across his hand—a little bit of stuff—the same as you again.'

'My lud, I shall not ask this obtuse witness any more questions,' said the angry counsel.

'Brother,' said Baron Martin, 'I think you had better not.'

Here is a hint for our old friend the clown in the pantomime. At the burning of a provision store, the crowd helped themselves freely. One man grasped a huge cheese as his share of the salvage; rising up with it he found himself face to face with a policeman, and with admirable presence of mind put the plunder into the officer's arms, saying: 'You had better take care of that, policeman, or some one will be walking off with it.'

Equally ready to relinquish his loot when there was no help for it was a Chicago negro, caught by a poultry fancier in the act of carrying off some of his live stock, and challenged with: 'What are you doing with my chickens?' 'I wuz gwine fer ter fetch 'em back, boss,' explained he. 'Dere's a nigger roun' here what's bin disputin along er me 'bout dem chickens. I said dey wuz Cossahin Chyniz; an he said dey wuz Alabarmar pullets; an I wuz jes takin 'em roun' fer ter establish my nollidge. Dey don't lay no aigs, does dey, boss? Ef dey does, I'm mighty shamed of hustlin 'em roun'. Aigs is scarce.'

Impudently cool as the darkey was, he must yield the palm for effrontery to the Erie Railway guard, whose interview with Manager Fisk is thus related in an American paper.

'You are a conductor on the Erie, I believe?'

'Yes, sir.'

'How long have you been on the road?'

'Fifteen years.'

'Worth some property, I learn?'

'Some.'

'Have a very fine house in Oswego? Cost you some thirty, forty, or fifty thousand dollars?'

'Yes, sir.'

'Some little money invested in bonds, I am told?'

'Yes, sir.'

'Own a farm near where you reside?'

'Yes, sir.'

'Had nothing when you commenced as conductor on our road?'

'Nothing to speak of.'

'Made the property since?'

'Yes, sir.'

'Been at work for no other parties?'

'No; but I have been saving money, and invested it from time to time to good advantage.'

'Well, sir, what will you give to settle? Of course you cannot pretend to say you have acquired this property from what you have saved from your salary! You will not deny that you have pocketed a great deal of money belonging to the railway—at least fifty or sixty thousand dollars? Now, sir, what will you give to settle, and not be disgraced, as you certainly will be if a trial is brought, and

you are compelled to give up the property you profess to own, but which in reality belongs to the Company?

'Well, Mr Manager, I had not thought of the matter. For several years I have been running my train to the best of my ability. Never looked at the matter in this light before. Never thought I was doing anything wrong. I have done nothing more than other conductors; tried to earn my salary and get it, and think I've succeeded. I don't know that I owe the Company anything. If you think I do, why, there's a little difference of opinion, and I don't want any trouble over it. I have a nice family, nice father and mother; relatives all of good standing; they would feel bad to have me arrested and charged with dishonesty. It would kill my wife. She has every confidence in me, and the idea that I would take a penny that did not belong to me would break her heart. I don't care anything for the matter myself; but on account of my family and relatives, if you won't say anything more about it, I'll give you say—a dollar!'

THE MONTH: SCIENCE AND ARTS.

MR CHARLES BARRY, President of the Royal Institute of British Architects, in his opening address, mentioned that with a view to facilitate the studies of young men, the library of the Institute is open from ten in the morning till nine at night, to members of the Architectural Association, to the architectural classes of the Royal Academy, of University College, and King's College. A fee of five shillings a year and a proper recommendation are the conditions on which this valuable privilege may be obtained; and it is to be hoped that earnest-minded students—the architects of the future—will hasten to avail themselves of this generously offered store of knowledge.

The Council of the Institute have given notice of lectures which are to be delivered at University College, London, during the present session, comprising Ancient Architecture as a Fine Art; on Construction and Materials; on Roofing, Masonry, Quarries, Arches, and Groining. At King's College also there will be lectures on the Mechanics of Construction; on Constructive Design and Practice, besides classes for the study of Architectural Drawing, Descriptive Geometry, and Surveying and Levelling. Young men who wish to study architecture and allied subjects have in the courses thus provided for, a favourable opportunity. Among the papers announced for reading at the meetings of the Institute are: On the Architecture of Norway; on the Prevention of Corrosion in Iron; and Syria, the Cradle of Gothic Architecture; which may be expected to present especial points of interest.

The Council of the Royal Agricultural Society have published a statement of members' privileges which is worth attention. On payment of a moderate fee the advice of a competent veterinary inspector can be had in cases of disease among the live-stock; post-mortem examinations can be made, and the animals may be sent to the Brown Institution, Wandsworth Road, London, where the Professor-Superintendent undertakes 'to carry out such investigations relating to the nature, treatment, and prevention of diseases of cattle, sheep,

and pigs, as may be deemed expedient by the Council of the Society.' Reports on the cases are drawn up quarterly, or specially as may be required. Analyses of guano and other fertilisers, of soils, of water, of vegetable products, may be had; also reports on seeds, with determination of the quantity of weeds mingled among them; on vegetable parasites; on diseases of farm-crops. And besides all this, any member whose lands are infested by noxious intruders may have a 'determination of the species of any insect, worm, or other animal, which, in any stage of its life, injuriously affects the farm-crops, with a report on its habits, and suggestions as to its extermination.'

Experiments on the fattening of animals by Messrs Lawes and Gilbert help to settle the much-debated question as to whether fat is produced exclusively from nitrogenous food or not. Their conclusion is, that excess of nitrogen contributes to growth but not to fatness. 'There is, of course,' they say, 'a point below which the proportion of nitrogenous substance in the food should not be reduced; but if this be much exceeded, the proportion of the increase, and especially of the fat-increase, to the nitrogenous substance consumed, rapidly decreases; and it may be stated generally, that taking our current fattening food-stuffs as they are, it is their supply of digestible non-nitrogenous, rather than of nitrogenous constituents which guides the amount, both of the food consumed and of the increase produced, by the fattening animal.'

Since the outbreak of discussion on spontaneous generation and the germ theory, many terms have become familiar with the term, Bacteria, by which certain minute organisms are described. The question involved may be studied from different points of view, as appears from a communication addressed to the Royal Society by Dr Downes and Mr Blunt, a chemist, on the Effect of Light upon Bacteria and other Organisms. Properly prepared solutions were inclosed in glass tubes; some of the tubes were placed in sunlight, others were covered with paper or some material that excluded light. The dark tubes became turbid; the light tubes remained clear. The experiments modified in various ways were continued from April to October; and the conclusions that the experimentalists came to were that—Light is inimical to the development of Bacteria and the microscopic fungi associated with putrefaction and decay, its action on the latter being apparently less rapid than upon the former—That the preservative quality of light is most powerful in the direct solar ray, but can be demonstrated to exist in ordinary diffused daylight—and That this preservative quality appears to be associated with the actinic rays of the spectrum. 'It appears to us,' say the two gentlemen, 'that the organisms which have been the subject of our research may be regarded simply as isolated cells, or minute protoplasmic masses specially fitted by their transparency and tenuity for the demonstration of physical influences. May we not expect that laws similar to those which here manifest themselves may be in operation throughout the vegetable, and perhaps also the animal kingdom wherever light has direct access to protoplasm? On the one hand, we have chlorophyll (colouring substance of leaves, &c.) owing its very existence to light, and whose functions are deoxidising; on the other, the

white protoplasm or germinal matter oxidising in its relations, and to which, in some of its forms at least, the solar rays are not only non-essential, but even devitalising and injurious.

'This suggestion,' continued the gentlemen, 'we advance provisionally and with diffidence; nor do we wish to imply that the relations of light to protoplasmic matter are by any means so simple as might be inferred from the above broad statement.'

A paper by Dr Barton Sanderson, F.R.S., read before the same Society, contains, amid much that is controversial about *Bacteria*, germs, organised particles, development and so forth, a few passages which all intelligent readers will be able to understand. On the question of disease-germs, the learned doctor remarks: 'In order that any particle may be rightly termed a disease-germ, two things must be proved concerning it: first, that it is a living organism; secondly, that if it finds its way into the body of a healthy human being or of an animal, it will produce the disease of which it is the germ. Now there is only one disease affecting the higher animals in respect of which anything of this kind has been proved, and that is splenic fever of cattle. In other words, there is but one case in which the existence of a disease-germ has been established. Comparing such a germ with the germinal particles we have been discussing, we see that there is but little analogy between them, for, first, the latter are not known to be organised; secondly, they have no power of producing disease, for it has been found by experiment that ordinary *Bacteria* may be introduced into the circulating blood of healthy animals in considerable quantities without producing any disturbance of health. So long as we ourselves are healthy, we have no reason to apprehend any danger from the morbid action of atmospheric dust, except in so far as it can be shewn to have derived infectiveness from some particular source of miasma or contagium.'

In a communication to the *American Journal*, Professor Kirkwood discusses the question—Does the motion of the inner satellite of Mars disprove the nebular hypothesis? This satellite he remarks is within three thousand four hundred miles of the planet's surface, and completes three orbital revolutions in less than a Martian day. How is this remarkable fact to be reconciled with the cosmogony of Laplace? The Professor then remarks that there is some similarity between the movements of the satellites and those of the rings of Saturn. The rings are composed of clouds of exceedingly minute planetoids, and while the outer ring revolves in a period somewhat greater than that of Saturn itself, 'the inner visible edge of the dusky ring completes a revolution in about eight hours. These rings, in the words of Professor Tait, 'like everything cosmical, must be gradually decaying, because in the course of their motion round the planet there must be continual impacts among the separate portions of the mass; and of two which impinge, one may be accelerated, but at the expense of the other. The other falls out of the race, as it were, and is gradually drawn in towards the planet. The consequence is that, possibly not so much on account of the improvement of telescopes of late years, but perhaps simply in consequence of this gradual closing in of the whole system, a new ring of Saturn has been observed inside the

two old ones, called from its appearance the crape ring, which was narrow when first observed, but is gradually becoming broader. That crape ring is formed of the laggards which have been thrown out of the race, and are gradually falling in towards Saturn's surface.' It is then suggested that, by a process similar to that here described, the phenomena of the Martian system may have been produced, and the argument concludes thus: 'Unless some such explanation as this can be given, the short period of the inner satellite will doubtless be regarded as a conclusive argument against the nebular hypothesis.'

In a paper read at a meeting of the Royal Astronomical Society, Mr Brett argues against the hypothesis that Mars is in a condition similar to that of the earth. He grounds his conclusion on the fact that in all his observations of Mars he has seen no clouds in the atmosphere thereof. That atmosphere is very dense, of great bulk, and is probably of a temperature so high that any aqueous vapour contained therein is prevented from condensation. Mr Brett implies that the glowing red colour of the middle of the disk is glowing red heat; and he remarks, in terrestrial experience there is always an intermediate phenomenon between vapour and snow, namely opaque cloud; and the absence of this condition seems fatal to the hypothesis that the white polar patch, as hitherto supposed, consists of snow. According to Mr Brett this patch is not only not snow; constitutes no part of the solid mass of the planet; but is nothing more than a patch of cloud, 'the only real cloud existing in Mars.'

From particulars published in the *Quarterly Journal* of the Geological Society, it appears that metallic copper and copper ore have been discovered along a tract of country in Nova Scotia, that the specimens when analysed at Swansea yielded satisfactory results, and that 'Nova Scotia may soon appear on the list of copper-producing countries, it being confidently expected that during the approaching summer fresh localities will be proved to contain copper-bearing veins.' And shifting the scene, we learn from the same *Journal* that in the South African Diamond Fields, two claims in Kimberley Mine, comprising eighteen hundred square feet, have yielded twenty-eight thousand carats of diamond; that at Lyndenburg, in the Transvaal country, most of the alluvial gold is supplied by Pilgrim's Rest Creek, the gold being coarse and nuggety, in well-rounded lumps, some of which, ten pounds in weight, are worth from seventy-six to eighty shillings an ounce; and that near the Oliphant River cobalt ore is found, of which a hundred tons have been sent to England. The same locality yields beryls, and is believed to be rich in other minerals.

Compressed air on being released from pressure can be cooled down to a very low temperature by throwing into it a jet of cold water. Advantage has been taken of this fact in contriving a new refrigerator or freezing chamber; and we are informed that at a trial which took place with a view to commercial purposes, 'in half an hour after commencing to work the machine, the thermometer within the freezing chamber stood at twenty degrees below zero; the interior of the chamber was covered with hoar-frost half an inch thick, bottles of water were frozen solid, and the general temperature of the room in which the

freezing chamber stands was reduced to thirty degrees Fahrenheit.' It is clear that by this invention a very cheap way of producing ice and maintaining coolness has become available; and that it should have been adopted by a Company for use on board ship to keep meat fresh during the voyage from Canada is what might be expected. Bearing in mind that in April of the present year the United States sent to England more than eight million pounds of meat, the importance of the new cooling method will be appreciated. Moreover, it may be applied to many other purposes which require a low temperature.

Another step has been taken towards diminishing the risk of railway travelling. Experience has shown that the danger most to be dreaded is collision; and that collision is brought about by defective signals. The interlocking system of signals is good, and the block-system is good; but they have failed in critical moments. The manager of the Railway Signal Works at Kilburn has invented a method which combines the two systems, and, as we are informed, has thereby 'dislodged the last atom of human fallibility' from railway signalling. Time will prove.

The block-system has been adopted, with endeavours to improve it, on some of the principal lines in France; and the companies point to statistics which show that railway travelling is safer in France than in Belgium or England; there being not more than one death to forty-five millions of travellers.

Professor Marsh's address to the meeting of the American Association for the Advancement of Science cannot fail to interest all readers who desire to learn something of the Introduction and Succession of Vertebrate Life in America. It is a subject very inviting, and very difficult to trace the succession from fishes to amphibia, reptiles and birds, and onwards to mammals; but cannot be properly discussed without the aid of much dry scientific detail. We shall content ourselves therefore with a few points in the address which admit of presentation in a popular form. 'During the Triassic time,' says Professor Marsh, 'the Dinosaurs attained in America an enormous development both in variety of forms and in size. The Triassic sandstone of the Connecticut valley has long been famous for its fossil footprints, especially the so-called bird-tracks, which are generally supposed to have been made by birds. A careful investigation, however, of nearly all the specimens yet discovered has convinced me that most of these three-toed tracks were certainly not made by birds; but by quadrupeds which usually walked upon their hind-feet alone, and only occasionally put to the ground their smaller anterior extremities.'

According to present knowledge, the earliest appearance of birds in America was during the Cretaceous period. Among them was one to which the name *Hesperornis* has been given. It was aquatic, nearly six feet in length, had jaws with teeth set in grooves, rudimentary wings, and legs similar to those of modern diving-birds. We have it on the authority of Professor Marsh that this strange creature 'was essentially a carnivorous swimming ostrich.'

Coming to the Miocene period, we are told of the Brontotherium, an animal nearly as large as the elephant, but with much shorter limbs. A

countryman looking at the skeleton of one of these monsters in the museum at Newhaven, was heard to say: 'Adam must have had a bad time of it when he branded that critter there.' It was succeeded by the equally huge *Chalicotherium*. And a little later we have the statement that 'the Marsupials are clearly the remnants of a very ancient fauna which occupied the American continent millions of years ago, and from which the other mammals were doubtless all derived, although the direct evidence of the transformation is wanting.'

It has long been supposed that the New World was peopled by migrations from the Old World. Professor Marsh holds a directly opposite opinion, whereby an interesting question is presented for discussion. The surveys and explorations carried on of late years by the United States government have brought to light such an amazing number of fossils, indicative of more, that the museums in America will soon be the largest and the richest in specimens in the world. On the other hand, we may point to Central Asia, and suggest that when that vast country shall be thoroughly explored, fossil relics may be discovered more diversified and interesting even than those of America.

A remarkable statement occurs in a Report by one of the government naturalists on the Injurious Insects of the West, namely that in the United States the loss of agricultural products through the ravages of insects amounts to 'probably more than two hundred millions of dollars each year, and that from one-quarter to one-half of this sum might be saved by preventive measures.'

Another item from beyond the Atlantic is the gigantic cuttle-fish, which was found after a storm at Catalina, on the coast of Newfoundland. The measurements of this monster were: circumference of body seven feet; length of tentacular arms thirty feet; of the ventral arms eleven feet, and eye-sockets eight inches diameter. This, the largest specimen ever preserved, is now in the New York Aquarium. With a grasp of sixty feet when living, it must have realised the descriptions in old writers of horrid sea-monsters that devoured divers, and enveloped even ships with their terrible arms. It is not the first that has been found on the shores of Newfoundland.

Readers who prefer the study of geography when mixed with adventures will find instruction and entertainment in Mr Alfred Simson's *Notes of Travel Across South America from Guayaquil to the Napo*, an affluent of the great river of Brazil, as published in the last number of the Geographical Society's *Journal*. Among descriptions of perilous incidents, of laborious exertions, and of narrow escapes, are accounts of wonderful scenery, of natural products, and of some of the native tribes, which make us aware that much yet remains to be discovered in that mountainous interior. In one place a party of the numerous Jivaro tribe was met with, one of the most independent and warlike in South America, who withstood alike the attacks of Incas and Spaniards, and have still a habit of killing white people. A Jesuit padre who had resided among them three years, told Mr Simson 'that he found it impossible to make any progress with them.'

On another occasion Mr Simson explored the almost unknown Putumayo, one of the largest of the Amazonian tributaries, navigable to the foot of

the Andes, eighteen hundred miles from the sea. This voyage, aided by the Brazilian government, with a view to steam-navigation, occupied fifty-seven days, beset by hardships, and the plague of the blood-thirsty *Pium flies*, all of which Mr. Simpson appears to have overcome by indomitable resolution.

In reply to further inquiries made regarding vegetable size, we are told that 'the best and purest, if not the cheapest, is the *hai-thao*, which is sold by Messrs Renault aîné et fils, 26 Rue du Roi de Sicile, Paris. Its price (last year) varied from 5.50 to 7 francs per kilogramme.' We are further told that this 'gum' was applied to the sizing of cotton cloths with good results, and that it might prove equally useful for the sizing of other materials such as paper. To one gallon of water, four ounces of the size are added and *well* boiled, the result of which is a jelly which gets very thick when cool. Besides the *hai-thao*, there are other kinds of size made from sea-weeds, such as the *gélase* of M. Martineau, druggist, St Parthaise, Charente Inférieure—sold at 3.50 francs per kilogramme; the *thao-français*, sold by M. Steinbach, Petit Guerilly, near Rouen, from 3.50 to 5 francs; and the *ly-cho* of M. Fichet, 8 Rue de Chateaux, Asnières, Seine. Of the foregoing we believe the *hai-thao* size to be the best.

THE ROLL-CALL OF HOME.

'FOR VALOUR.'

A SOLDIER came from distant lands, to seek his childhood's home :
A gallant boy he marched away, when first he longed to roam
With colours flying o'er his head, with music's thrilling strain ;
But now a saddened, dying man, he wandered home again.

He left his love, the village belle, and cried, in careless glee :
'When medals shine upon my breast, a hero's bride thou 'lt be.'
To bring his mother laurels back, his youthful heart had yearned ;
A simple cross, a life of toil, were all that he had earned.

Beside the old churchyard there sat, upon a rustic stile,
A pretty little village maid, who gave him smile for smile.
He asked her news of dear old friends—his dog among the rest—
And tremulous then he slowly asked for those he loved the best.

But when his father's, mother's, name she heard him softly say,
The merry face grew grave and sad ; the bright smile passed away.
She told, their son was lost or dead, their hearts' delight and pride ;
'Nenth yonder yew-tree,' said the maid, 'they're sleeping, side by side.'

He asked her of his boyhood's love : a joyous answer came ;
'Thou knowest all my friends,' she cried ; 'that *was* my mother's name.'
The soldier's face was fraught with grief she could not understand ;
Yet, with a child's quick sympathy, she placed in his her hand.

'Come home,' she said ; but with a kiss, quoth he, 'That may not be ;
I soon shall reach the only home now left, on earth, for me.'
She was his last remaining friend ; and thus, life's journey done,
He gave her all he had to give—the cross, too dearly won !

Bethought the maid, he needs repose as he has come from far ;
So prayed that he would tell, some day, the story of the war.
'We too will rest a little while, for I am tired,' she said ;
'Where daisies grow, beneath the tree, come now and rest thy head.'

She led him, gently, to the spot ; and sleeping, calmly, there,
The mother found them, hand in hand. How different the pair !
He was at peace ; but in that rest where sorrow ne'er may come.
Ah! may the soldier then have gained, in Heaven, a better home.

AUGUSTA A. L. MAGRA.

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END OF FOURTEENTH VOLUME.

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